LAER/BACT Determination

LAER/BACT Determination

Evaluation of Lowest Achievable Emission Rate/Best Available Control Technology

To evaluate BACT for the proposed turbines, the SCAQMD LAER/BACT guideline for large gas turbines was reviewed. The relevant LAER/BACT determinations for this analysis are shown in Table 8.1D-1.

TABLE 8.1D-1
SCAQMD LAER/BACT Guideline For Large Gas Turbines

Pollutant	Achieved in Practice or Contained in SIP	Technologically Feasible		
NO _x	2 ppmvd, 1 hr avg, excluding startup and shutdown. SCR or equal and natural gas fuel. ^a	2 ppmvd, 1 hr avg, excluding startup and shutdown. SCR or equal and natural gas fuel. ^a		
SO ₂	PUC-regulated natural gas or	PUC-regulated natural gas or		
	 Non-PUC-regulated gas with no more than 0.75 g S/100 dscf. 	 Non-PUC-regulated gas with no more than 0.75 g S/100 dscf 		
		3. LPG		
СО	3.0 ppmv	3 ppmv		
	Oxidation catalyst and natural gas fuel ^a	Oxidation catalyst and natural gas fuel or LPG ^a		
VOC	2.0 ppmv and natural gas fuel ^b	2.0 ppmv and natural gas fuel ^b		
PM ₁₀	Air inlet filter cooler, lube oil vent coalescer and natural gas fuel	Air inlet cooler/filter, lube oil vent coalescer and natural gas fuel or LPG		
Ammonia	5 ppmvd ^b	5 ppmvd ^b		

^a The SCAQMD used NO_x and CO emissions achieved at the ANP Blackstone Power Plant, located in Massachusetts (Massachusetts Department of Environmental Protection Permit Number 118969). The intent to adopt 2 ppmvd NO_x and 3 ppmvd CO as BACT/LAER levels for Combined Cycle/Cogeneration Gas Turbines was initially noticed on January 16, 2003. It was subsequently discussed at the SCAQMD's January 23, 2003 and March 27, 2003 BACT Scientific Review Committee (SRC) meetings. While the Blackstone Power Plant does not have duct burners, the Vernon Power Plant is being designed with the capability of complying with the 2 ppmvd NO_x and 3 ppmvd CO BACT levels.

The EPA RACT-BACT-LAER Clearinghouse (RBLC) was also consulted to review recent permitting decisions for gas-fired gas turbines. These recent LAER/BACT decisions are shown in Attachment 8.1D-A for CO and NO_x. With the exception of two projects, all CO and NO_x emission levels listed are either at or above the project design BACT/LAER levels for VPP. IDC Bellingham is shown in the RBLC search as having an emissions limit of 1.5 ppmv NO_x. Per documentation in the SCAQMD BACT Guidelines, the Bellingham project was identified by the SCAQMD as cancelled in May 2003 (see Attachment 8.1D-A). The CPV Warren Project is listed as having CO emission limits of 1.3 and 1.8 ppmv in the

b SCAQMD BACT policy (Section D) and the CARB September 1999 Guidance for Power Plant Sitting and Best Available Control Technology list 2 ppmvd as the VOC BACT level. In Section D of its BACT Policy Guidelines, the SCAQMD lists 5 ppmvd ammonia slip as the BACT level.

RBLC search. However, as shown in the documentation presented in Attachment 8.1D-B, this project is not yet fully permitted and is neither constructed nor operating. Thus, the results of the RBLC search are consistent with the project design BACT levels.

The ARB's BACT Clearinghouse Database was also reviewed for recent BACT decisions regarding large gas turbine projects in California. Relevant LAER/BACT decisions are summarized in Table 8.1D-2. NO_x levels shown in these determinations range from 5 to 2.5 ppm.

Finally, the ARB's Guidance for Power Plant Sitting and Best Available Control Technology was also reviewed. The relevant LAER/BACT levels recommended in the ARB power plant guidance document are summarized in Table 8.1D-3.

The Project proposes to use dry low-NO $_x$ combustors with selective catalytic reduction technology that will achieve a NO $_x$ exhaust concentration of 2 ppmv or less (1-hour average) and a CO exhaust concentration of 2 ppmv (3-hour average). The gas turbines will be fueled with natural gas to minimize SO $_2$ and PM $_{10}$ emissions. VOC levels are inherently very low for the turbines (i.e., 2 ppmv) and comply with LAER/BACT. The VPP will be exclusively natural gas fired (except for the fire pump) and will employ emission controls on the cooling tower (0.0005 percent drift eliminators), inlet air conditioning (filtration and moisture conditioning), and mist eliminators on lube oil system vents. The SCR systems will also be designed to achieve an ammonia slip of 5 ppmv (1-hour average). These pollutant levels will achieve emission reductions consistent with the SCAQMD LAER/BACT guideline and the ARB BACT guideline for power plants. A more detailed top down analysis for BACT for NO $_x$ and CO emissions will be included in the Prevention of Significant Determination Permit Application being submitted to USEPA Region IX under a separate cover.

To evaluate BACT for the proposed fire pump engine, the SCAQMD LAER/BACT guideline for diesel IC engines driving fire pumps was reviewed. The relevant LAER/BACT determinations for this analysis are shown in Table 8.1D-4.

The emergency diesel fire pump engine will meet the LAER/BACT limits shown in Table 8.1D-4 with the use of low sulfur content fuel and low emission engine designs.

Table 8.1D-5 shows the proposed emission rates for the VPP gas turbines with duct burners. These emission rates clearly comply with the SCAQMD's current LAER/BACT guidance.

TABLE 8.1D-2 Summary of BACT Determinations From ARB BACT Clearinghouse

Facility/District	Permit Number	Equipment/Rating	NO _x Limit/Control Technology	VOC/HC Limit/Control Technology
Sacramento Cogeneration Authority Sacramento Metropolitan AQMD	A330-849-98 A330-850-98 A330-851-98	GE LM6000 combined-cycle gas turbine with supplemental firing (42 MW each)	5 ppm (dry low-NO _x combustion and SCR)	Oxidation catalyst (10% destruction efficiency)
Sacramento Power Authority Sacramento Metropolitan AQMD	A330-852-98	Siemens V84.2 combined-cycle gas turbine with supplemental firing (103 MW)	3 ppm (water injection and SCR)	Oxidation catalyst (5% destruction efficiency)
Carson Energy Sacramento Metropolitan AQMD	A330-854-98	GE LM6000 combined-cycle gas turbine with supplemental firing (42 MW)	5 ppm (water injection and SCR)	Oxidation catalyst (10% destruction efficiency)
SEPCO	A330-855-98	GE Frame 7EA gas turbine with supplemental firing (82 MW)	5 ppm (dry low-NO _x combustion and SCR)*	Oxidation catalyst (5% destruction efficiency)
La Paloma Generating Company, LLC	S-3412-1	ABB Model GT-24 gas turbine without supplemental firing (262 MW each)	2.5 ppm (dry low-NO _x combustion and SCR)	
Sutter Power Plant	A330-882-99	Westinghouse 501F gas turbine with supplemental firing (250 MW each)	2.5 ppm (dry low-NO _x combustion and SCR)	
Crockett Cogeneration	A330-859-98	GE Frame 7FA gas turbine with supplemental firing (240 MW)	5 ppm (dry low-NO _x combustion and SCR)	

^{*} District indicates that applicant proposed 2.6 ppm to lower offset liability.

TABLE 8.1D-3
ARB BACT Guidance for Power Plants

Pollutant	BACT
NO _x	2.5 ppmv @ 15% O ₂ (1-hour average) 2.0 ppmv @ 15% O ₂ (3-hour average)
SO ₂	Fuel sulfur limit of 1.0 grains/100 scf
СО	Nonattainment areas: 6 ppmv @ 15% O_2 (3-hour average) Attainment areas: District discretion
VOC	2 ppmv @ 15% O ₂ (3-hour average)
Ammonia	5 ppmv @ 15% O ₂ (3-hour average)
PM ₁₀	Fuel sulfur limit of 1.0 grains/100 scf

TABLE 8.1D-4
SCAQMD LAER/BACT Guidance for Emergency Diesel IC Engines (175 - 300 hp)
BACT Guidelines Section D

Brief Galdennes Section B	D
Pollutant	Diesel Engines Driving Fire Pumps
NO _x + non-methane hydrocarbons	4.9 g/bhp-hr
SO _x	Ultra-Low-sulfur diesel fuel (0.0015% by weight)
СО	2.6 g/bhp-hr
VOC	See above NO _x + non-methane hydrocarbons
PM ₁₀	0.15 g/bhp-hr

TABLE 8.1D-5 VPP Proposed LAER/BACT

NO _x	СО	VOC	PM ₁₀	SO _x
2 ppmvd @ 15% O ₂ , 1-hour rolling average	2 ppmvd @ 15% O ₂ , 3-hour rolling average	2 ppmvd @ 15% O ₂ , 1-hour rolling average	Primary use of natural gas fuel limited to 4 ppm sulfur*	Primary use of natural gas fuel limited to 4 ppm sulfur ^a

^{*} Natural gas provided by the Gas Company is limited to 16 ppm in the South Coast by Rule 431.1. Generally, the actual sulfur content is 4 ppm (4 ppm corresponds to 0.0038 gr/100 scf).

ATTACHMENT 8.1D-A

EPA RACT/BACT/LAER Determinations for Combined-Cycle Gas Turbine Projects



U.S. Environmental Protection Agency

Technology Transfer Network Clean Air Technology Center RACT/BACT/LAER Clearinghouse

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EPA Home > Air & Radiation > TTNWeb - Technology Transfer Network > Clean Air Technology Center > RACT/BACT/LAER Clearinghouse > RBLC Database Query > RBLC Find Lowest Emission Rate > RBLC Query Results

Ranking Report for Search Criteria

Pollutant: NOX
Process Category: Large Combustion Turbines (> 25 MW)
Process Type: 15.210
Process Name: Natural Gas
Permit Date Between 01/01/2000 And 11/29/2005

New Search

	RBLCID	PERMIT DATE	CORPORATE/COMPANY NAME & FACILITY NAME	STANDARD EMISSION LIMIT
Ch	eck Un-	Check		
V	NJ-0058	06/01/2000	PSEG FOSSILL LLC LINDEN GENERATING STATION PSEG FOSSIL LLC LINDEN GENERATING STATION	0.0236 LB/MW-H
V	<u>CA-1050</u>	09/11/2000	IDC BELLINGHAM, LLC IDC BELLINGHAM, LLC	1.5000 PPM @ 15% <u>O2</u>
~	WA-0302	02/23/2001	GOLDENDALE ENERGY, INC. GOLDENDALE ENERGY PROJECT	2.0000 PPM @ 15% O2
V	AZ-0043	11/12/2003	DUKE ENERGY ARLINGTON VALLEY DUKE ENERGY ARLINGTON VALLEY (AVEFII)	2.0000 PPM @ 15% O2
V	AZ-0043	11/12/2003	DUKE ENERGY ARLINGTON VALLEY DUKE ENERGY ARLINGTON VALLEY (AVEFII)	2.0000 PPM @ 15% O2
~	AZ-0038	05/15/2002	GILA BEND POWER GENERATING STATION GILA BEND POWER GENERATING STATION	2.0000 PPM @ 15% O2
V	PA-0226	04/09/2002	LIMERICK PARTNERS, LLC LIMERICK POWER STATION	2.0000 PPM @ 15% O2

~	WA-0315	04/17/2003	SUMAS ENERGY 2 GENERATION FACILITY SUMAS ENERGY 2 GENERATION FACILITY	2.0000 PPM @ 15% <u>O2</u>
>	MA-0027	05/07/2000	CABOT POWER CORPORATION CABOT POWER CORPORATION	2.0000 PPM @ 15% O2
V	FL-0263	02/08/2005	FLORIDA POWER AND LIGHT FPL TURKEY POINT POWER PLANT	2.0000 PPMVD@ 15 % O2
~	CA-0997	09/01/2003	SACRAMENTO MUNICIPAL UTILITY DISTRICT SACRAMENTO MUNICIPAL UTILITY DISTRICT	2.0000 PPM @ 15% O2
V	NV-0038	12/29/2003	IVANPAH ENERGY CENTER, L.P. IVANPAH ENERGY CENTER, L.P.	2.0000 PPMVD
>	NV-0037	05/14/2004	SEMPRA ENERGY RESOURCES COPPER MOUNTAIN POWER	2.0000 PPMVD
Y	AZ-0049	09/04/2003	ALLEGHENY ENERGY SUPPLY LLC LA PAZ GENERATING FACILITY	2.0000 PPMVD
~	AZ-0047	12/01/2004	DOME VALLEY ENERGY PARTNERS WELLTON MOHAWK GENERATING STATION	2.0000 PPM AT 15% O2
~	AZ-0047	12/01/2004	DOME VALLEY ENERGY PARTNERS WELLTON MOHAWK GENERATING STATION	2.0000 PPM AT 15% O2
>	NV-0035	08/16/2005	SIERRA PACIFIC POWER COMPANY TRACY SUBSTATION EXPANSION PROJECT	2.0000 PPM @ 15% <u>O2</u>
~	NV-0035	08/16/2005	SIERRA PACIFIC POWER COMPANY TRACY SUBSTATION EXPANSION PROJECT	2.0000 PPM @ 15% <u>O2</u>
V	DC-0003	08/06/2004	BOBS PLACE	2.0000 PPM @ 15% <u>O2</u>
>	CA-1096	05/27/2003	VERNON CITY LIGHT & POWER VERNON CITY LIGHT & POWER	2.0000 PPM @ 15% O2
V	VA-0291	07/30/2004	CPV WARREN LLC CPV WARREN LLC	2.0000 PPM @ 15% <u>O2</u>
~	RI-0019	05/03/2000	FPLE RHODE ISLAND STATE ENERGY, L.P. RHODE ISLAND STATE ENERGY CENTER	2.0000 PPM @ 15% O2
~	NV-0034	11/13/2000	LAS VEGAS COGENERATION, LP LAS VEGAS COGENERATION FACILITY	2.0000 PPM @ 15% O2
~	AZ-0039	03/07/2003	SALT RIVER PROJECT/SANTAN GEN. PLANT SALT RIVER PROJECT/SANTAN GEN. PLANT	2.0000 PPM @ 15% O2
~	CA-1097	05/27/2003	MAGNOLIA POWER PROJECT, SCPPA MAGNOLIA POWER PROJECT, SCPPA	2.0000 PPM @ 15% <u>O2</u>
>	FL-0240	08/07/2001	COMPETITIVE POWER VENTURES PIERCE, LTD.	2.5000 PPM @ 15%

			CPV PIERCE	<u>O2</u>
~	FL-0241	01/17/2002	COMPETIVE POWER VENTURES CANA LTD. CPV CANA	2.5000 PPM @ 15% <u>O2</u>
~	NJ-0044	06/26/2001	MANTUA CREEK GENERATING FACILITY MANTUA CREEK GENERATING FACILITY	2.5000 PPMVD @ 15% O2
~	GA-0105	04/17/2003	SAVANNAH ELECTRIC AND POWER CO MCINTOSH COMBINED CYCLE FACILITY	2.5000 PPM @ 15% <u>O2</u>
V	FL-0227	09/07/2001	EL PASO MERCHANT ENERGY CENTER EL PASO BELLE GLADE ENERGY CENTER	2.5000 PPM @ 15% <u>O2</u>
~	AZ-0036	12/02/2000	PINNACLE WEST ENERGY CORP. PINNACLE WEST ENERGY CORP./REDHAWK GEN. FACILITY	2.5000 PPM @ 15% <u>O2</u>
~	AZ-0035	12/14/2000	DUKE ENERGY ARLINGTON VALLEY DUKE ENERGY ARLINGTON VALLEY	2.5000 PPM @ 15% <u>O2</u>
~	MD-0033	09/27/2001	FREE STATE ELECTRIC, LLC KELSON RIDGE	2.5000 PPM @ 15% <u>O2</u>
~	VA-0260	11/21/2002	Cogentrix Energy Inc HENRY COUNTY POWER	2.5000 PPM @ 15% <u>O2</u>
V	WA-0291	01/03/2003	WALLULA GENERATION, LLC WALLULA POWER PLANT	2.5000 PPM @ 15% <u>O2</u>
~	PA-0179	08/07/2001	SWEC LLC SWEC LLC	2.5000 PPM@ 15% O2
~	OR-0040	03/12/2003	KLAMATH GENERATION, LLC KLAMATH GENERATION, LLC	2.5000 PPM @ 15% <u>O2</u>
~	OR-0039	12/30/2003	Peoples Energy Resources COB ENERGY FACILITY, LLC	2.5000 PPM @ 15% <u>O2</u>
V	FL-0245	04/15/2003	FLORIDA POWER & LIGHT FPL MANATEE PLANT - UNIT 3	2.5000 PPM @ 15% <u>O2</u>
V	AL-0185	07/12/2002	BARTON SHOALS ENERGY, LLC BARTON SHOALS ENERGY	2.5000 PPM @ 15% <u>O2</u>
~	NJ-0043	03/28/2002	LIBERTY GENERATING STATION LIBERTY GENERATING STATION	2.5000 PPMVD @ 15% <u>O2</u>
V	NJ-0043	03/28/2002	LIBERTY GENERATING STATION LIBERTY GENERATING STATION	2.5000 PPMVD @ 15% <u>O2</u>
~	PA-0189	01/16/2002	CONECTIV BETHLEHEM, INC CONECTIV BETHLEHEM, INC.	2.5000 PPM @ 15% <u>O2</u>
>	PA-0188	03/28/2002	FAIRLESS ENERGY LLC FAIRLESS ENERGY LLC	2.5000 PPM @ 15% <u>O2</u>

V	AZ-0034	02/15/2001	HARQUAHALA GENERATING CO. HARQUAHALA GENERATING PROJECT	2.5000 PPM @ 15% <u>O2</u>
~	PA-0160	10/10/2000	CALPINE CONSTRUCTION FINANCE CO., LP CALPINE CONSTRUCTION FINANCE CO., LP	2.5000 PPM @ 15% O2
~	AZ-0033	03/22/2001	MESQUITE POWER LLC MESQUITE GENERATING STATION	2.5000 PPM @ 15% O2
~	FL-0226	09/11/2001	EL PASO MERCHANT ENERGY CENTER EL PASO MANATEE ENERGY CENTER	2.5000 PPM @ 15% <u>O2</u>
~	WA-0288	09/04/2001	LONGVIEW ENERGY DEVELOPMENT LONGVIEW ENERGY DEVELOPMENT	2.5000 PPM @ 15% O2
V	FL-0225	08/17/2001	EL PASO MERCHANT ENERGY COMPANY EL PASO BROWARD ENERGY CENTER	2.5000 PPM @ 15% O2
V	GA-0100	04/17/2003	SAVANNAH ELECTRIC AND POWER CO. MCINTOSH COMBINED-CYCLE FACILITY	2.5000 PPM @ 15% O2
V	FL-0256	09/08/2003	PROGRESS ENERGY FLORIDA HINES ENERGY COMPLEX, POWER BLOCK 3	2.5000 PPMVD @15% <u>O2</u>
~	PA-0228	07/12/2001	ALLEGHENY ENERGY SUPPLY CO., L.L.C. SPRINGDALE TOWNSHIP STATION	2.5000 PPM @ 15% O2
~	VA-0289	02/05/2004	DUKE ENERGY WYTHE, LLC DUKE ENERGY WYTHE, LLC	2.5000 PPM @ 15% O2
V	VA-0289	02/05/2004	DUKE ENERGY WYTHE, LLC DUKE ENERGY WYTHE, LLC	2.5000 PPM @ 15% <u>O2</u>
V	VA-0287	12/01/2003	JAMES CITY ENERGY PARK LLC JAMES CITY ENERGY PARK	2.5000 PPM @ 15% <u>O2</u>
~	FL-0244	04/16/2003	FLORIDA POWER & LIGHT FPL MARTIN PLANT	2.5000 PPM @ 15% O2
~	<u>VA-0261</u>	09/06/2002	COMPETITIVE POWER VENTURE CPV CUNNINGHAM CREEK	2.5000 PPM @ 15% O2
~	OR-0035	01/16/2002	PORTLAND GENERAL ELECTRIC COMPANY PORT WESTWARD PLANT	2.5000 PPM @ 15% <u>O2</u>
V	<u>ID-0010</u>	10/19/2001	GARNET ENERGY LLC MIDDLETON FACILITY	2.5000 PPM @ 15% O2
~	CA-0949	05/22/2001	MOUNTAINVIEW POWER MOUNTAINVIEW POWER	2.5000 PPM @ 15% O2
~	OR-0026	01/18/2002	UMATILLA GENERATING COMPANY, L.P. HERMISTON FACILITY	2.5000 PPM @ 15% <u>O2</u>
V	VA-0262	12/06/2002	MIRANT DANVILLE, LLC	2.5000 PPM @ 15%

			MIRANT AIRSIDE INDUSTRIAL PARK	<u>O2</u>
~	AZ-0041	03/14/2001	KYRENE GENERATING STATION KYRENE GENERATING STATION, SALT RIVER PROJECT	2.5000 PPM @ 15% O2
V	TX-0344	08/22/2001	DEER PARK ENERGY CENTER LP DEER PARK ENERGY CENTER	2.5000 PPM @ 15% O2
~	WY-0061	04/04/2003	BLACK HILLS CORP. BLACK HILLS CORP./NEIL SIMPSON TWO	2.5000 PPM @ 15% O2
V	FL-0244	04/16/2003	FLORIDA POWER & LIGHT FPL MARTIN PLANT	2.5000 PPM @ 15% O2
~	IN-0095	12/07/2001	ALLEGHENY ENERGY SUPPLY CO. LLC (ACADIA BAY ENERGY ALLEGHENY ENERGY SUPPLY CO. LLC	2.5000 PPM @15%O2
>	PA-0184	10/10/2000	CALPINE CONSTRUCTION FINANCE CO. CALPINE BERKS ONTELAUNEE POWER PLANT	2.5000 PPM @ 15% O2
>	WA-0292	10/23/2001	DUKE ENERGY GRAYS HARBOR LLC/ENERGY NORTHWEST SATSOP COMBUSTION TURBINE PROJECT	2.5000 PPM @ 15% O2
V	PA-0223	01/30/2002	DUKE ENERGY FAYETTE, LLC DUKE ENERGY FAYETTE, LLC	2.5000 PPM @ 15% O2
>	CA-0950	01/11/2000	VALERO ENERGY CORPORATION VALERO REFINING COMPANY	2.5000 PPM @ 15% <u>O2</u>
~	VA-0287	12/01/2003	JAMES CITY ENERGY PARK LLC JAMES CITY ENERGY PARK	2.5000 PPM @ 15% O2
>	PA-0196	08/07/2001	SWEC-FALLS TOWNSHIP SWEC-FALLS TOWNSHIP	3.0000 PPM @ 15% <u>O2</u>
~	IN-0114	07/24/2002	MIRANT SUGAR CREEK LLC MIRANT SUGAR CREEK LLC	3.0000 PPM @ 15% <u>O2</u>
V	<u>IN-0114</u>	07/24/2002	MIRANT SUGAR CREEK LLC MIRANT SUGAR CREEK LLC	3.0000 PPM @ 15% O2
~	ID-0012	10/19/2001	GARNET ENERGY LLC GARNET ENERGY, MIDDLETON FACILITY	3.0000 PPM @ 15% <u>O2</u>
V	OH-0248	09/24/2002	CALPINE CORPORATION LAWRENCE ENERGY	3.0000 PPM @ 15% <u>O2</u>
>	<u>IN-0086</u>	05/09/2001	MIRANT SUGAR CREEK, LLC MIRANT SUGAR CREEK, LLC	3.0000 PPM @ 15% <u>O2</u>
V	IN-0085	06/07/2001	PSEG LAWRENCEBURG ENERGY FACILITY PSEG LAWRENCEBURG ENERGY FACILITY	3.0000 PPMDV @ 15% O2
>	AZ-0037	02/23/2001	TPS Arizona Operations, PANDA GILA RIVER PANDA GILA RIVER	3.0000 PPM @ 15% O2

~	DE-0016	10/17/2000	CONECTIV ENERGY, INC. HAY ROAD POWER COMPLEX UNITS 5-8	3.0000 PPM @ 15% <u>O2</u>
~	OH-0252	12/28/2004	DUKE ENERGY HANGING ROCK, LLC DUKE ENERGY HANGING ROCK ENERGY FACILITY	3.0000 PPM @ 15% <u>O2</u>
V	CO-0052	08/11/2002	ROCKY MOUNTAIN ENERGY CENTER, LLC. ROCKY MOUNTAIN ENERGY CENTER, LLC.	3.0000 PPM @ 15% <u>O2</u>
V	MN-0053	07/15/2004	MN MUNICIPAL POWER AGENCY FAIRBAULT ENERGY PARK	3.0000 PPMVD @ 15% 02
V	IN-0110	10/05/2001	COGENTRIX LAWRENCE CO., LLC COGENTRIX LAWRENCE CO., LLC	3.0000 PPM @ 15% <u>O2</u>
~	IN-0110	10/05/2001	COGENTRIX LAWRENCE CO., LLC COGENTRIX LAWRENCE CO., LLC	3.0000 PPM @ 15% <u>O2</u>
~	GA-0093	10/28/2001	AUGUSTA ENERGY CENTER AUGUSTA ENERGY CENTER	3.0000 PPM @ 15% <u>O2</u>
>	IN-0092	07/20/2000	WHITING CLEAN ENERGY, INC. WHITING CLEAN ENERGY, INC.	3.0000 PPM @ 15% O2
~	MT-0019	06/07/2002	CONTINENTAL ENERGY SERVICES, INC. CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	3.0000 PPM @ 15% O2
V	IA-0058	04/10/2002	MIDAMERICAN ENERGY GREATER DES MOINES ENERGY CENTER	3.0000 PPM @ 15% O2
~	NC-0101	09/29/2005	FORSYTH ENERGY PROJECTS, LLC FORSYTH ENERGY PLANT	3.0000 PPM @ 15% <u>O2</u>
>	GA-0101	10/23/2002	DUKE ENERGY MURRAY LLC MURRAY ENERGY FACILITY	3.0000 PPM @ 15% <u>O2</u>
~	MI-0357	02/04/2003	KALKASKA GENERATING LLC KALKASKA GENERATING, INC	3.0000 PPM @ 15% <u>O2</u>
~	OH-0252	12/28/2004	DUKE ENERGY HANGING ROCK, LLC DUKE ENERGY HANGING ROCK ENERGY FACILITY	3.0000 PPM @ 15% <u>O2</u>
~	VA-0256	01/11/2002	TENASKA VIRGINIA PARTNERS, L. P. TENASKA FLUVANNA	3.0000 PPMVD @ 15% <u>O2</u>
~	MI-0302	07/25/2001	MIRANT WYANDOTTE LLC MIRANT WYANDOTTE LLC	3.0000 PPM @ 15% <u>O2</u>
~	WA-0289	02/22/2002	TRANSALTA TRANSALTA CENTRALIA GENERATION LLC	3.0000 PPM @ 15% O2
~	OH-0248	09/24/2002	CALPINE CORPORATION LAWRENCE ENERGY	3.0000 PPM @ 15% <u>O2</u>
~	MT-0019	06/07/2002	CONTINENTAL ENERGY SERVICES, INC.	3.0000 PPM @ 15%

			CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	<u>O2</u>
V	GA-0094	12/27/2001	EFFINGHAM COUNTY POWER, LLC EFFINGHAM COUNTY POWER, LLC	3.0000 PPM @ 15% <u>O2</u>
y	MI-0361	01/30/2003	SOUTH SHORE POWER LLC SOUTH SHORE POWER LLC	3.0000 PPM @ 15% <u>O2</u>
V	GA-0102	01/15/2002	OGLETHORPE POWER CORPORATION WANSLEY COMBINED CYCLE ENERGY FACILITY	3.0000 PPM @ 15% O2
~	MN-0054	12/04/2003	MANKATO ENERGY CENTER	3.0000 PPM @ 15% <u>O2</u>
V	FL-0216	06/04/2001	PROGRESS ENERGY FLORIDA HINES ENERGY COMPLEX, POWER BLOCK 2	3.5000 PPM @ 15% <u>O2</u>
V	AL-0188	02/16/2001	TENASKA ALABAMA II PARTNERS TENASKA ALABAMA II GENERATING STATION	3.5000 PPM @ 15% <u>O2</u>
V	PA-0197	06/15/2001	RELIANT ENERGY HUNTERSTOWN, LLC RELIANT ENERGY HUNTERSTOWN, LLC	3.5000 PPM @ 15% <u>O2</u>
Y	AR-0041	08/08/2000	TPS - DELL, LLC. TPS - DELL, LLC	3.5000 PPM @ 15% O2
>	FL-0239	03/27/2002	JACKSONVILLE ELECTRIC AUTHORITY (JEA) JEA/BRANDY BRANCH	3.5000 PPM @ 15% <u>O2</u>
V	TX-0248	03/06/2000	CHAMBERS ENERGY L.P./AMERICAN NATIONAL POWER CHAMBERS ENERGY L.P./AMERICAN NATIONAL POWER	3.5000 PPM @ 15% O2
.	TX-0247	03/22/2000	CHANNEL ENERGY CENTER, L.P. CHANNEL ENERGY FACILITY	3.5000 PPM @ 15% <u>O2</u>
V	OH-0255	03/29/2001	PSEG WATERFORD ENERGY LLC PSEG WATERFORD ENERGY LLC	3.5000 PPM @ 15% <u>O2</u>
>	OH-0255	03/29/2001	PSEG WATERFORD ENERGY LLC PSEG WATERFORD ENERGY LLC	3.5000 PPM @ 15% <u>O2</u>
~	VA-0255	11/18/2002	Virginia Power VA POWER - POSSUM POINT	3.5000 PPM @ 15% <u>O2</u>
Y	OK-0070	06/13/2002	GENOVA OKLAHOMA LLC GENOVA OK I POWER PROJECT	3.5000 PPM @ 15% <u>O2</u>
>	FL-0233	09/21/2001	ORLANDO UTILITIES COMMISSION (OUC) OUC STANTON ENERGY CENTER	3.5000 PPM @ 15% O2
V	FL-0219	05/03/2001	CPV ATLANTIC, LTD CPV ATLANTIC POWER GENERATING FACILITY	3.5000 PPM @ 15% O2
>	NM-0044	06/27/2002	DUKE ENERGY CURRY LLC CLOVIS ENERGY FACILITY	3.5000 PPMV @ 15% O2

V	TX-0411	03/26/2002	CALPINE CONSTRUCTION FINANCE COMPANY LP AMELIA ENERGY CENTER	3	3.5000 PPM @ 15% <u>O</u> 2
~	TX-0419	03/22/2000	CALPINE CONSTRUCTION FINANCE CO., LP CHANNEL ENERGY FACILITY	71	3.5000 PPM @ 15% <u>O2</u>
~	NE-0023	06/22/2004	NEBRASKA PUBLIC POWER DISTRICT BEATRICE POWER STATION	;	3.5000 PPM @ 15% <u>O2</u>
~	SC-0061	04/09/2001	COLUMBIA ENERGY LLC COLUMBIA ENERGY LLC	ĝ	3.5000 PPM @ 15% <u>O2</u>
~	MI-0267	06/07/2001	RENAISSANCE POWER LLC RENAISSANCE POWER LLC	4	3.5000 PPM @ 15% <u>O2</u>
V	TX-0374	03/24/2003	BP AMOCO CHEMICAL CO CHOCOLATE BAYOU PLANT	2)	3.5000 PPM @ 15% O2
~	MS-0058	12/13/2001	CHOCTAW GAS GENERATION, LLC CHOCTAW GAS GENERATION, LLC		3.5000 PPM @ 15% <u>O2</u>
V	NC-0085	03/14/2001	CAROLINA POWER AND LIGHT CP&L ROWAN CO TURBINE FACILITY	i i	3.5000 PPM @ 15% <u>O2</u>
~	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY	4	3.5000 PPM @ 15% O2
~	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		3.5000 PPM @ 15% <u>O2</u>
~	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		3.5000 PPM @ 15% <u>O2</u>
V	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		3.5000 PPM @ 15% <u>O2</u>
~	OH-0257	12/27/2001	JACKSON COUNTY POWER, LLC JACKSON COUNTY POWER, LLC		3.5000 PPM @ 15% <u>O2</u>
~	<u>AR-0070</u>	08/23/2002	GENOVA ARKANSAS I, LLC GENOVA ARKANSAS I, LLC	9	3.5000 PPM @ 15% <u>O2</u>
~	AR-0070	08/23/2002	GENOVA ARKANSAS I, LLC GENOVA ARKANSAS I, LLC		3.5000 PPM @ 15% <u>O2</u>
~	TX-0328	02/11/2000	BAYTOWN ENERGY CENTER, LP BAYTOWN COGENERATION PLANT	3	3.5000 PPM @ 15% O2
~	AR-0043	02/27/2001	PINE BLUFF ENERGY LLC PINE BLUFF ENERGY LLC		3.5000 PPM @ 15% O2
~	AR-0070	08/23/2002	GENOVA ARKANSAS I, LLC GENOVA ARKANSAS I, LLC	a a	3.5000 PPM @ 15% O2
V	FL-0252	08/15/2001	FORT PIERCE REPOWERING PROJECT, LLC		3.5000 PPM @ 15%

		81	FORT PIERCE REPOWERING	<u>O2</u>
V	VA-0255	11/18/2002	Virginia Power VA POWER - POSSUM POINT	3.5000 PPM @ 15% O2
V	PA-0192	10/20/2001	LOWER MOUNT BETHEL ENERGY, LLC LOWER MOUNT BETHEL ENERGY, LLC	3.5000 PPM @ 15% O2
v	PA-0190	05/03/2000	LIBERTY ELECTRIC POWER, LLC LIBERTY ELECTRIC POWER , LLC	3.5000 PPM @ 15% O2
V	OK-0096	06/03/2003	REDBUD ENERGY LP REDBUD POWER PLANT	3.5000 PPM @ 15% <u>O2</u>
V	NC-0082	12/21/2000	CAROLINA POWER AND LIGHT - RICHMOND CAROLINA POWER AND LIGHT - RICHMOND CO. FACILITY	3.5000 PPM @ 15% O2
>	NE-0017	05/29/2003	NEBRASKA PUBLIC POWER DISTRICT BEATRICE POWER STATION	3.5000 PPM @ 15% <u>O2</u>
V	TX-0232	08/31/2000	CHAMBERS ENERGY, L.P. ELECTRIC GENERATING STATION	3.5000 PPM @ 15% O2
V	MS-0051	11/13/2001	LSP LIMITED PARTNERSHIP, BATESVILLE GENERATION LSP-BATESVILLE GENERATION FACILITY	3.5000 PPMV @15% <u>O2</u>
V	OK-0070	06/13/2002	GENOVA OKLAHOMA LLC GENOVA OK I POWER PROJECT	3.5000 PPM @ 15% O2
~	AL-0179	10/03/2001	TENASKA ALABAMA IV PARTNERS, LP TENASKA TALLADEGA GENERATING STATION	3.5000 PPM @ 15% O2
V	AR-0057	10/09/2001	TENASKA ARKANSAS PARTNERS, LP TENASKA ARKANSAS PARTNERS, LP	3.5000 PPM @ 15% <u>O2</u>
V	OH-0263	08/09/2001	CALPINE CORPORATION FREMONT ENERGY CENTER, LLC	3.5000 PPMVD
V	MS-0064	08/16/2000	TPS MCADAMS. LLC TPS MCADAMS, LLC	3.5000 PPM @ 15% <u>O2</u>
V	MS-0065	11/13/2001	LONE OAK ENERGY CENTER, LLC LONE OAK ENERGY CENTER, LLC	3.5000 PPM @ 15% O2
V	MS-0065	11/13/2001	LONE OAK ENERGY CENTER, LLC LONE OAK ENERGY CENTER, LLC	3.5000 PPMVD
~	MS-0065	11/13/2001	LONE OAK ENERGY CENTER, LLC LONE OAK ENERGY CENTER, LLC	3.5000 PPM @ 15% <u>O2</u>
V	MS-0073	11/23/2004	RELIANT ENERGY CHOCTAW COUNTY, LLC	3.5000 PPM @ 15% 02
~	MS-0073	11/23/2004	RELIANT ENERGY CHOCTAW COUNTY, LLC	3.5000 PPM @ 15% 02

y	MS-0073	11/23/2004	RELIANT ENERGY CHOCTAW COUNTY, LLC	3.5000 PPM @ 15% 02
>	OH-0265	10/16/2001	Dresden Energy DRESDEN ENERGY LLC	3.5000 PPM @ 15% O2
V	MI-0365	01/28/2003	MIRANT WYANDOTTE LLC MIRANT WYANDOTTE LLC	3.5000 PPM @ 15% <u>O2</u>
V	AL-0180	12/11/2001	DUKE ENERGY DALE, LLC DUKE ENERGY DALE, LLC	3.5000 PPM @ 15% <u>O2</u>
~	MS-0044	03/27/2001	CALEDONIA POWER LLC CALEDONIA POWER LLC	3.5000 PPM @ 15% <u>O2</u>
V	<u>WI-0174</u>	09/20/2000	BADGER GENERATING CO LLC BADGER GENERATING CO LLC	3.5000 PPM @ 15% <u>O2</u>
Y	AR-0051	04/01/2002	DUKE ENERGY DUKE ENERGY-JACKSON FACILITY	3.5000 PPM @ 15% <u>O2</u>
~	OH-0264	05/23/2002	NORTON ENERGY NORTON ENERGY STORAGE, LLC	3.5000 PPM @ 15% <u>O2</u>
~	TX-0352	12/31/2002	BRAZOS VALLEY ENERGY LP BRAZOS VALLEY ELECTRIC GENERATING FACILITY	3.5000 PPM @ 15% <u>O2</u>
~	OH-0263	08/09/2001	CALPINE CORPORATION FREMONT ENERGY CENTER, LLC	3.5000 PPM @ 15% <u>O2</u>
V	OH-0264	05/23/2002	NORTON ENERGY NORTON ENERGY STORAGE, LLC	3.5000 PPM @ 15% <u>O2</u>
V	TX-0336	08/31/2000	CHAMBERS ENERGY LP HARRIS ENERGY FACILITY	3.5000 PPM @ 15% <u>O2</u>
V	TX-0336	08/31/2000	CHAMBERS ENERGY LP HARRIS ENERGY FACILITY	3.5000 PPM @ 15% <u>O2</u>
V	TX-0402	10/17/2000	AVISTA-STEAG BRAZOA GENERATING FACILITY	3.5000 PPM @ 15% <u>O2</u>
~	NC-0094	01/09/2002	GENPOWER EARLEYS, LLC GENPOWER EARLEYS, LLC	3.5000 PPM @ 15% <u>O2</u>
>	MS-0055	06/24/2002	EL PASO MERCHANT ENERGY CO. EL PASO MERCHANT ENERGY CO.	3.5000 PPM @ 15% <u>O2</u>
~	NC-0095	05/28/2002	MIRANT GASTONIA LLC MIRANT GASTONIA POWER FACILITY	3.5000 PPM @ 15% <u>O2</u>
~	NC-0095	05/28/2002	MIRANT GASTONIA LLC MIRANT GASTONIA POWER FACILITY	3.5000 PPM @ 15% <u>O2</u>
V	NC-0095	05/28/2002	MIRANT GASTONIA LLC	3.5000 PPM @ 15 %

			MIRANT GASTONIA POWER FACILITY	<u>O2</u>
~	OH-0254	08/14/2003	DUKE ENERGY NORTH AMERICA DUKE ENERGY WASHINGTON COUNTY LLC	3.5000 PPM @ 15% <u>O2</u>
~	OH-0254	08/14/2003	DUKE ENERGY NORTH AMERICA DUKE ENERGY WASHINGTON COUNTY LLC	3.5000 PPM @ 15% <u>O2</u>
~	AL-0141	04/10/2000	GEORGIA POWER COMPANY GPC - GOAT ROCK COMBINED CYCLE PLANT	3.5000 PPMVD
~	WV-0014	12/18/2001	PANDA CULLODEN POWER, L.P. PANDA CULLODEN GENERATING STATION	3.5000 PPM @ 15% <u>O2</u>
V	AL-0181	10/23/2001	DUKE ENERGY AUTAUGA, LLC DUKE ENERGY AUTAUGA, LLC	3.5000 PPM @ 15% <u>O2</u>
~	SC-0071	04/09/2001	COLUMBIA ENERGY CENTER COLUMBIA ENERGY CENTER I-26 & US HWY 21 SOUTH	3.5000 PPM @ 15% <u>O2</u>
~	MI-0302	07/25/2001	MIRANT WYANDOTTE LLC MIRANT WYANDOTTE LLC	3.5000 PPM @15% O2
~	MI-0303	07/26/2001	MIDLAND COGENERATION VENTURE MIDLAND COGENERATION	3.5000 PPM @ 15%O2
~	TN-0144	02/01/2002	CALPINE CONSTRUCTION FINANCE COMPANY, L. P. HAYWOOD ENERGY CENTER, LLC	3.5000 PPM @ 15% <u>O2</u>
~	OH-0265	10/16/2001	Dresden Energy DRESDEN ENERGY LLC	3.5000 PPM @ 15% <u>O2</u>
~	AR-0047	11/09/2001	HOT SPRINGS POWER PROJECT HOT SPRINGS POWER PROJECT	3.5000 PPM @ 15% <u>O2</u>
~	TX-0352	12/31/2002	BRAZOS VALLEY ENERGY LP BRAZOS VALLEY ELECTRIC GENERATING FACILITY	3.5000 PPM @ 15% <u>O2</u>
~	OK-0090	03/21/2003	DUKE ENERGY DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	3.5000 PPM @ 15% <u>O2</u>
~	TN-0144	02/01/2002	CALPINE CONSTRUCTION FINANCE COMPANY, L. P. HAYWOOD ENERGY CENTER, LLC	3.5000 PPM @ 15% <u>O2</u>
~	NC-0086	01/10/2002	FAYETTEVILLE GENERATION, LLC FAYETTEVILLE GENERATION, LLC	3.5000 PPMVD @ 15% O2
~	TN-0156	04/09/2001	MEMPHIS GENERATION, LLC MEMPHIS GENERATION, LLC	3.5000 PPM @ 15% O2
~	<u>AL-0165</u>	06/06/2000	CALPINE CONSTRUCTION FINANCE CORPORATION LC DECATUR ENERGY CENTER	3.6000 PPM @ 15% <u>O2</u>
~	AL-0168	01/12/2001	GENPOWER KELLEY LLC GENPOWER KELLEY LLC	3.6000 PPM @ 15% <u>O2</u>

>	AL-0143	03/03/2000	ALABAMA ELECTRIC COOPERATIVE AEC - MCWILLIAMS PLANT	3.6000 PPM @ 15% O2
V	AL-0141	04/10/2000	GEORGIÁ POWER COMPANY GPC - GOAT ROCK COMBINED CYCLE PLANT	3.6000 PPM @ 15% <u>O2</u>
V	AL-0162	01/08/2001	ALABAMA POWER COMPANY AUTAUGAVILLE COMBINED CYCLE PLANT	3.6000 PPM @ 15% <u>O2</u>
V	NV-0033	08/19/2004	EL DORADO ENERGY, LLC EL DORADO ENERGY, LLC	3.7000 PPM @ 15% <u>O2</u>
V	CO-0049	01/17/2001	NORTH AMERICAN POWER GP -KIOWA CREEK NORTH AMERICAN POWER GP -KIOWA CREEK	4.0000 PPM @ 15% <u>O2</u>
V	TX-0391	12/20/2002	OXY VINYLS LP OXY COGENERATION FACILITY	4.0000 PPM @ 15% O2
V	TX-0428	12/19/2002	OXY VINYLS LP HOUSTON OPERATIONS BATTLEGROUND SITE	4.0000 PPM @ 15% <u>O2</u>
V	MN-0043	11/17/2000	XCEL ENERGY, BLACK DOG ELECTRIC GENERATING STATION XCEL ENERGY, BLACK DOG ELECTRIC GENERATING STATION	4.5000 PPM @ 15% O2
V	<u>IL-0091</u>	01/28/2000	LSP NELSON ENERGY, LLC LSP NELSON ENERGY, LLC	4.5000 PPM @ 15% <u>O2</u>
V	MI-0363	01/07/2003	BLUEWATER ENERGY CENTER LLC BLUEWATER ENERGY CENTER LLC	4.5000 PPM @ 15% <u>O2</u>
~	LA-0157	03/08/2002	PERRYVILLE ENERGY PARTNERS LLC PERRYVILLE POWER STATION	4.5000 PPM @ 15% O2
>	MN-0048	01/12/2001	NORTHERN STATES POWER COMPANY/XCEL ENERGY BLACK DOG GENERATING PLANT	4.5000 PPM @ 15%O2
>	LA-0127	08/25/2000	CLECO MIDSTREAM RESOURCES, LLC PERRYVILLE	4.5000 PPM @ 15% <u>O2</u>
V	LA-0164	01/31/2002	ACADIA POWER PARTNERS ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	4.5000 PPM @ 15% <u>O2</u>
~	TX-0343	06/27/2001	MC ENERGY PARTNERS LP MONTGOMERY COUNTY POWER PROJECT	5.0000 PPM @ 15% <u>O2</u>
>	TX-0381	01/31/2003	ENNIS-TRACTEBEL II LP ENNIS TRACTEBEL POWER	5.0000 PPM @ 15% O2
V	TX-0437	07/05/2002	HARTBURG POWER, LP HARTBURG POWER, LP	5.0000 PPM @ 15% O2
Y	TX-0372	07/28/2000	WEST TEXAS ENERGY LIMITED PARTNERSHIP WEST TEXAS ENERGY FACILITY	5.0000 PPM @ 15% <u>O2</u>
V	TX-0401	12/15/2000	COTTONWOOD ENERGY COMPANY	5.0000 PPM @ 15%

			COTTONWOOD ENERGY PROJECT	<u>O2</u>
V	LA-0136	12/26/2001	VENTURES LEASE COMPANY, LLC PLAQUEMINE, IBERVILLE PARISH	5.0000 PPM @ 15% <u>O2</u>
~	TX-0405	12/15/2000	WESTVACO TEXAS LP WESTVACO TEXAS LP	5.0000 PPM @ 15% <u>O2</u>
V	LA-0120	02/26/2002	SHELL CHEMICAL LP GEISMAR PLANT	5.0000 PPM @ 15% <u>O2</u>
~	TX-0262	01/03/2000	ARCHER POWER PARTNERS, L.P. ARCHER GENERATING STATION	5.0000 PPM @ 15% <u>O2</u>
V	TX-0325	05/09/2000	MIDLOTHIAN ENERGY LIMITED PARTNERSHIP MIDLOTHIAN ENERGY PROJECT	5.0000 PPM @ 15% O2
V	TX-0325	05/09/2000	MIDLOTHIAN ENERGY LIMITED PARTNERSHIP MIDLOTHIAN ENERGY PROJECT	5.0000 PPM @ 15% <u>O2</u>
V	TX-0388	02/12/2002	AUSTIN ELECTRIC UTILITY SAND HILL ENERGY CENTER	5.0000 PPM @ 15% O2
~	TX-0407	12/06/2002	STEAG POWER LLC STERNE ELECTRIC GENERATING FACILITY	5.0000 PPMVD @ 15% <u>O2</u>
~	TX-0296	07/14/2000	WISE COUNTY POWER COMPANY LLC WISE COUNTY POWER	5.0000 PPM @ 15% O2
~	VA-0260	11/21/2002	Cogentrix Energy Inc HENRY COUNTY POWER	5.0000 PPM @ 15% O2
~	TX-0372	07/28/2000	WEST TEXAS ENERGY LIMITED PARTNERSHIP WEST TEXAS ENERGY FACILITY	5.0000 PPM @ 15% <u>O2</u>
~	TX-0337	12/21/2000	CEDAR POWER PARTNERS LP CEDAR BLUFF POWER PROJECT	5.0000 PPM @ 15% <u>O2</u>
~	MN-0054	12/04/2003	MANKATO ENERGY CENTER	5.5000 PPM @ 15% <u>O2</u>
V	OK-0041	01/19/2000	NRG MCCLAIN LLC MCCLAIN ENERGY FACILITY	9.0000 PPM @ 15% <u>O2</u>
Y	TX-0330	03/14/2000	DUKE ENERGY JACK LP JACK COUNTY POWER PLANT	9.0000 PPM @ 15% <u>O2</u>
~	TX-0351	03/11/2002	SEI TEXAS LLC WEATHERFORD ELECTRIC GENERATION FACILITY	9.0000 PPM @ 15% <u>O2</u>
V	IN-0087	06/06/2001	DUKE ENERGY, VIGO LLC DUKE ENERGY, VIGO LLC	9.0000 PPM @ 15% O2
~	OK-0050	01/21/2000	CALPINE CORP ONETA GENERATING STA	9.0000 PPM @ 15% O2

Y	SC-0060	04/03/2000	SANTEE COOPER RAINEY GENERATING STATION	9.0000 PPM @ 15% <u>O2</u>
V	TX-0297	03/14/2000	MOBIL OIL CORPORATION EXXON-MOBIL BEAUMONT REFINERY	9.0000 PPM @ 15% O2
~	TX-0299	01/31/2000	DUKE ENERGY KAUFMAN LP KAUFMAN COGEN LP	9.0000 PPM @ 15% O2
~	MI-0268	06/26/2000	KM POWER COMPANY KM POWER COMPANY	9.0000 PPM @ 15% <u>O2</u>
~	TX-0326	07/20/2000	THE AES AURORA AES WOLF HOLLOW LP	9.0000 PPM @ 15% <u>O2</u>
~	SC-0066	04/03/2000	SANTEE COOPER RAINEY GENERATION STATION SANTEE COOPER RAINEY GENERATION STATION	9.0000 PPM @ 15% <u>O2</u>
. 🗸	<u>TX-0350</u>	01/31/2002	ENNIS-TRACTEBEL II LP ENNIS TRACTEBEL POWER	9.0000 PPM @ 15% O2
~	FL-0186	02/24/2000	CITY OF GAINESVILLE CITY OF GAINESVILLE REGIONAL UTILITIES	9.0000 PPM @ 15% O2
V	TX-0405	12/15/2000	WESTVACO TEXAS LP WESTVACO TEXAS LP	9.0000 PPM @ 15% O2
~	LA-0153	05/16/2001	CARVILLE ENERGY LLC CARVILLE ENERGY CENTER	9.0000 PPM @ 15% O2
~	LA-0146	05/10/2000	SHELL CHEMICAL COMPANY - GEISMAR PLANT SHELL CHEMICAL COMPANY - GEISMAR PLANT	9.0000 PPM @ 15% O2
V	TX-0262	01/03/2000	ARCHER POWER PARTNERS, L.P. ARCHER GENERATING STATION	9.0000 PPM @ 15% O2
~	TX-0260	12/13/2000	LG & E POWER, INC. PALESTINE ENERGY FACILITY	9.0000 PPM @ 15% <u>O2</u>
~	TX-0261	06/26/2001	DUKE ENERGY BELL L.P. BELL ENERGY FACILITY	9.0000 PPM @ 15% <u>O2</u>
~	TX-0233	10/29/2001	RELIANT ENERGY CHANNELVIEW LP RELIANT ENERGY- CHANNELVIEW COGENERATION FACILITY	10.0000 PPM @ 15% O2
V	OK-0056	02/12/2002	MUSTANG POWER LLC HORSESHOE ENERGY PROJECT	12.5000 PPM @ 15% O2
~	TX-0273	03/21/2000	COASTAL POWER COMPANY BASTROP CLEAN ENERGY CENTER	12.6000 PPM @15% O2
~	TX-0294	03/20/2000	GATEWAY POWER PROJECT LP GATEWAY POWER PROJECT	13.4000 PPM @ 15% <u>O2</u>
V	TX-0383	03/06/2000	COBISA-FORNEY LIMITED PARTNERSHIP	13.4000 PPM @ 15%

			FORNEY PLANT	<u>O2</u>
V	DE-0016	10/17/2000	CONECTIV ENERGY, INC. HAY ROAD POWER COMPLEX UNITS 5-8	14.0000 PPM @ 15% <u>O2</u>
>	OK-0045	08/15/2001	REDBUD ENERGY LP REDBUD POWER PLT	15.0000 PPM @ 15% <u>O2</u>
V	TX-0234	01/08/2002	EDINBURG ENERGY LIMITED PARTNERSHIP EDINBURG ENERGY LIMITED PARTNERSHIP	15.0000 PPM @ 15% O2
~	IL-0091	01/28/2000	LSP NELSON ENERGY, LLC LSP NELSON ENERGY, LLC	15.0000 PPM @ 15% <u>O2</u>
~	OK-0044	08/16/2001	SMITH COGENERATION OK INC SMITH POCOLA ENERGY PROJECT	15.0000 PPM @ 15% <u>O2</u>
~	OK-0046	05/17/2001	THUNDERBIRD GENERATION LLC THUNDERBIRD POWER PLT	15.0000 PPM @ 15% <u>O2</u>
~	<u>NJ-0036</u>	10/24/2001	AES RED OAK LLC AES RED OAK LLC	15.3000 PPM @ 15% <u>O2</u>
~	NJ-0059	05/09/2001	LINDEN COGENERATION TECHNOLOGY COGEN TECHNOLOGIES LINDEN VENTURE, L.P	18.0000 LB/H
V	PA-0186	05/04/2001	FLORIDA POWER & LIGHT FPL ENERGY MARCUS HOOK, L.P.	18.7000 PPM @ 15% O2
V	LA-0122	08/14/2001	INTERNATIONAL PAPER - MANSFIELD MILL MANSFIELD MILL	21.7000 PPM @ 15 % <u>O2</u>
~	PA-0187	03/21/2001	GRAYS FERRY COGEN PARTNERSHIP GRAYS FERRY COGEN PARTNERSHIP	23.0000 PPM @ 15% <u>O2</u>
~	KY-0081	06/07/2001	KENTUCKY PIONEER ENERGY, LLC KENTUCKY PIONEER ENERGY, LLC - TRAPP	25.0000 PPM @ 15% O2
V	<u>MI-0362</u>	04/21/2003	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP MIDLAND COGENERATION (MCV)	25.0000 PPM @ 15% <u>O2</u>
~	MI-0268	06/26/2000	KM POWER COMPANY KM POWER COMPANY	25.0000 PPM @ 15% <u>O2</u>
~	AR-0024	02/28/2000	WRIGHTSVILLE POWER FACILITY WRIGHTSVILLE POWER FACILITY	25.0000 PPM @ 15% <u>O2</u>
y	OK-0055	02/12/2002	MUSTANG POWER LLC MUSTANG ENERGY PROJECT	25.0000 PPM @ 15% 02
>	OH-0268	03/26/2002	Global Energy, Inc. LIMA ENERGY COMPANY	25.0000 PPM @ 15% O2
>	TX-0429	02/23/2000	VALERO REFINING CO TEXAS VALERO REFINING CO TEXAS CITY	26.0000 PPM @ 15% <u>O2</u>

>	WA-0299	09/06/2002	SUMAS ENERGY 2, INC. SUMAS ENERGY 2 GENERATION FACILITY	27.0000 PPM @ 15% <u>O2</u>			
V	MI-0362	04/21/2003	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP MIDLAND COGENERATION (MCV)	42.0000 PPM @ 15% O2			
	SC-0062	09/22/2000	SC ELECTRIC AND GAS COMPANY - URQUHART STATION SC ELECTRIC AND GAS COMPANY - URQUHART STATION	102.0000 PPM @ 15% O2			
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Process Category: Large Combustion Turbines (> 25 MW)
Process Type: 15.210
Process Name: Natural Gas
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New Search

	RBLCID	PERMIT DATE	CORPORATE/COMPANY NAME & FACILITY NAME	STANDARD EMISSION LIMIT
Ch	eck Un-	-Check		
V	NJ-0058	06/01/2000	PSEG FOSSILL LLC LINDEN GENERATING STATION PSEG FOSSIL LLC LINDEN GENERATING STATION	0.0110 LB/MW-H
~	<u>VA-0291</u>	07/30/2004	CPV WARREN LLC CPV WARREN LLC	1.3000 PPM @ 15% <u>O2</u>
~	VA-0291	07/30/2004	CPV WARREN LLC CPV WARREN LLC	1.8000 PPM @ 15% <u>O2</u>
~	AZ-0043	11/12/2003	DUKE ENERGY ARLINGTON VALLEY DUKE ENERGY ARLINGTON VALLEY (AVEFII)	2.0000 PPM @ 15% <u>O2</u>
V	NV-0034	11/13/2000	LAS VEGAS COGENERATION, LP LAS VEGAS COGENERATION FACILITY	2.0000 PPM @ 15% O2
~	<u>CA-1097</u>	05/27/2003	MAGNOLIA POWER PROJECT, SCPPA MAGNOLIA POWER PROJECT, SCPPA	2.0000 PPM @ 15% O2
V	GA-0100	04/17/2003	SAVANNAH ELECTRIC AND POWER CO. MCINTOSH COMBINED-CYCLE FACILITY	2.0000 PPM @ 15% O2

V	WA-0302	02/23/2001	GOLDENDALE ENERGY, INC. GOLDENDALE ENERGY PROJECT	2.0000 PPM @ 15% <u>O2</u>
~	WA-0315	04/17/2003	SUMAS ENERGY 2 GENERATION FACILITY SUMAS ENERGY 2 GENERATION FACILITY	2.0000 PPM @ 15% <u>O2</u>
V	GA-0102	01/15/2002	OGLETHORPE POWER CORPORATION WANSLEY COMBINED CYCLE ENERGY FACILITY	2.0000 PPM @ 15% <u>O2</u>
V	MA-0027	05/07/2000	CABOT POWER CORPORATION CABOT POWER CORPORATION	2.0000 PPM @ 15% <u>O2</u>
V	WA-0292	10/23/2001	DUKE ENERGY GRAYS HARBOR LLC/ENERGY NORTHWEST SATSOP COMBUSTION TURBINE PROJECT	2.0000 PPM @ 15% <u>O2</u>
>	NJ-0043	03/28/2002	LIBERTY GENERATING STATION LIBERTY GENERATING STATION	2.0000 PPMVD @ 15% <u>O2</u>
V	NJ-0043	03/28/2002	LIBERTY GENERATING STATION LIBERTY GENERATING STATION	2.0000 PPMVD @ 15% <u>O2</u>
~	CA-1096	05/27/2003	VERNON CITY LIGHT & POWER VERNON CITY LIGHT & POWER	2.0000 PPM @ 15% <u>O2</u>
~	OR-0039	12/30/2003	Peoples Energy Resources COB ENERGY FACILITY, LLC	2.0000 PPM @ 15% O2
>	GA-0105	04/17/2003	SAVANNAH ELECTRIC AND POWER CO MCINTOSH COMBINED CYCLE FACILITY	2.0000 PPM @ 15% <u>O2</u>
~	OH-0248	09/24/2002	CALPINE CORPORATION LAWRENCE ENERGY	2.0000 PPM @ 15% O2
V	CA-1050	09/11/2000	IDC BELLINGHAM, LLC IDC BELLINGHAM, LLC	2.0000 PPM @ 15% <u>O2</u>
V	ID-0010	10/19/2001	GARNET ENERGY LLC MIDDLETON FACILITY	2.0000 PPM @ 15% O2
V	GA-0093	10/28/2001	AUGUSTA ENERGY CENTER AUGUSTA ENERGY CENTER	2.0000 PPM @ 15% O2
~	WA-0291	01/03/2003	WALLULA GENERATION, LLC WALLULA POWER PLANT	2.0000 PPM @ 15% <u>O2</u>
~	WA-0288	09/04/2001	LONGVIEW ENERGY DEVELOPMENT LONGVIEW ENERGY DEVELOPMENT	2.0000 PPM @ 15% <u>O2</u>
~	WA-0299	09/06/2002	SUMAS ENERGY 2, INC. SUMAS ENERGY 2 GENERATION FACILITY	2.0000 PPM @ 15% <u>O2</u>
Y	MS-0051	11/13/2001	LSP LIMITED PARTNERSHIP, BATESVILLE GENERATION LSP-BATESVILLE GENERATION FACILITY	2.5000 %PPM @15% <u>O2</u>
~	PA-0189	01/16/2002	CONECTIV BETHLEHEM, INC	2.5000 PPM @ 15%

			CONECTIV BETHLEHEM, INC.	<u>O2</u>
~	AZ-0037	02/23/2001	TPS Arizona Operations, PANDA GILA RIVER PANDA GILA RIVER	2.8000 PPM @ 15% <u>O2</u>
V	MI-0267	06/07/2001	RENAISSANCE POWER LLC RENAISSANCE POWER LLC	3.0000 PPM @ 15% O2
V	PA-0196	08/07/2001	SWEC-FALLS TOWNSHIP SWEC-FALLS TOWNSHIP	3.0000 PPM@15% O2
V	AZ-0049	09/04/2003	ALLEGHENY ENERGY SUPPLY LLC LA PAZ GENERATING FACILITY	3.0000 PPMVD
V	MD-0033	09/27/2001	FREE STATE ELECTRIC, LLC KELSON RIDGE	3.0000 PPM @ 15% <u>O2</u>
V	PA-0188	03/28/2002	FAIRLESS ENERGY LLC FAIRLESS ENERGY LLC	3.0000 PPM @ 15% O2
V	AZ-0047	12/01/2004	DOME VALLEY ENERGY PARTNERS WELLTON MOHAWK GENERATING STATION	3.0000 PPM AT 15% O2
~	AZ-0047	12/01/2004	DOME VALLEY ENERGY PARTNERS WELLTON MOHAWK GENERATING STATION	3.0000 PPMVD AT 15% O2
V	AZ-0043	11/12/2003	DUKE ENERGY ARLINGTON VALLEY DUKE ENERGY ARLINGTON VALLEY (AVEFII)	3.0000 PPM @ 15% O2
V	VA-0261	09/06/2002	COMPETITIVE POWER VENTURE CPV CUNNINGHAM CREEK	3.1000 PPM @ 15% O2
V	NJ-0044	06/26/2001	MANTUA CREEK GENERATING FACILITY MANTUA CREEK GENERATING FACILITY	3.1000 PPMVD @ 15% O2
V	FL-0252	08/15/2001	FORT PIERCE REPOWERING PROJECT, LLC FORT PIERCE REPOWERING	3.5000 PPM @ 15% <u>O2</u>
V	NV-0033	08/19/2004	EL DORADO ENERGY, LLC EL DORADO ENERGY, LLC	3.5000 PPM @ 15% <u>O2</u>
V	NV-0035	08/16/2005	SIERRA PACIFIC POWER COMPANY TRACY SUBSTATION EXPANSION PROJECT	3.5000 PPM @ 15% <u>O2</u>
Y	NV-0035	08/16/2005	SIERRA PACIFIC POWER COMPANY TRACY SUBSTATION EXPANSION PROJECT	3.5000 PPM @ 15% O2
V	MI-0302	07/25/2001	MIRANT WYANDOTTE LLC MIRANT WYANDOTTE LLC	3.6000 PPM @ 15% <u>O2</u>
~	MI-0365	01/28/2003	MIRANT WYANDOTTE LLC MIRANT WYANDOTTE LLC	3.8000 PPM @ 15% <u>O2</u>
¥	AZ-0041	03/14/2001	KYRENE GENERATING STATION KYRENE GENERATING STATION, SALT RIVER PROJECT	3.9000 PPM @ 15% <u>O2</u>

~	WI-0174	09/20/2000	BADGER GENERATING CO LLC BADGER GENERATING CO LLC	4.0000 PPM @ 15% <u>O2</u>
~	MN-0054	12/04/2003	MANUATO ENERGY CENTER	4.0000 PPM @ 15% O2
			MANKATO ENERGY CENTER	***************************************
~	AZ-0033	03/22/2001	MESQUITE POWER LLC MESQUITE GENERATING STATION	4.0000 PPM @ 15% O2
V	CA-0997	09/01/2003	SACRAMENTO MUNICIPAL UTILITY DISTRICT SACRAMENTO MUNICIPAL UTILITY DISTRICT	4.0000 PPM @ 15% O2
~	AZ-0038	05/15/2002	GILA BEND POWER GENERATING STATION GILA BEND POWER GENERATING STATION	4.0000 PPM @ 15% <u>O2</u>
V	NV-0038	12/29/2003	IVANPAH ENERGY CENTER, L.P. IVANPAH ENERGY CENTER, L.P.	4.0000 PPMVD
V	MI-0361	01/30/2003	SOUTH SHORE POWER LLC SOUTH SHORE POWER LLC	4.0000 PPM @ 15% <u>O2</u>
V	MN-0054	12/04/2003	MANKATO ENERGY CENTER	4.8000 PPM @ 15% <u>O2</u>
V	OR-0035	01/16/2002	PORTLAND GENERAL ELECTRIC COMPANY PORT WESTWARD PLANT	4.9000 PPM @ 15% O2
~	TX-0372	07/28/2000	WEST TEXAS ENERGY LIMITED PARTNERSHIP WEST TEXAS ENERGY FACILITY	5.0000 PPM @ 15% O2
~	TX-0248	03/06/2000	CHAMBERS ENERGY L.P./AMERICAN NATIONAL POWER CHAMBERS ENERGY L.P./AMERICAN NATIONAL POWER	5.0000 PPM @ 15% O2
>	OH-0263	08/09/2001	CALPINE CORPORATION FREMONT ENERGY CENTER, LLC	5.0000 PPM @ 15% <u>O2</u>
~	TX-0325	05/09/2000	MIDLOTHIAN ENERGY LIMITED PARTNERSHIP MIDLOTHIAN ENERGY PROJECT	5.0000 PPM @ 15% <u>O2</u>
V	TX-0325	05/09/2000	MIDLOTHIAN ENERGY LIMITED PARTNERSHIP MIDLOTHIAN ENERGY PROJECT	5.0000 PPM @ 15% <u>O2</u>
V	PA-0223	01/30/2002	DUKE ENERGY FAYETTE, LLC DUKE ENERGY FAYETTE, LLC	5.0000 PPM @ 15% O2
\checkmark	MI-0357	02/04/2003	KALKASKA GENERATING LLC KALKASKA GENERATING, INC	5.0000 PPM @ 15% <u>O2</u>
~	OR-0040	03/12/2003	KLAMATH GENERATION, LLC KLAMATH GENERATION, LLC	5.0000 PPM @ 15% O2
V	ID-0012	10/19/2001	GARNET ENERGY LLC GARNET ENERGY, MIDDLETON FACILITY	5.0000 PPM @ 15% <u>O2</u>
V	TX-0336	08/31/2000	CHAMBERS ENERGY LP	5.0000 PPM @ 15%

			HARRIS ENERGY FACILITY	<u>O2</u>
Y	TX-0336	08/31/2000	CHAMBERS ENERGY LP HARRIS ENERGY FACILITY	5.0000 PPM @ 15% O2
V	MT-0019	06/07/2002	CONTINENTAL ENERGY SERVICES, INC. CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	5.2700 PPM @ 15% O2
>	MT-0019	06/07/2002	CONTINENTAL ENERGY SERVICES, INC. CONTINENTAL ENERGY SERVICES, INC., SILVER BOW GEN	5.2700 PPM @ 15% <u>O2</u>
~	IA-0058	04/10/2002	MIDAMERICAN ENERGY GREATER DES MOINES ENERGY CENTER	5.4000 PPM @ 15% <u>O2</u>
~	PA-0192	10/20/2001	LOWER MOUNT BETHEL ENERGY, LLC LOWER MOUNT BETHEL ENERGY, LLC	6.0000 PPM @ 15% O2
~	<u>AZ-0040</u>	05/26/2000	Arizona Public Service APS WEST PHOENIX	6.0000 PPM @ 15% O2
V	OH-0252	12/28/2004	DUKE ENERGY HANGING ROCK, LLC DUKE ENERGY HANGING ROCK ENERGY FACILITY	6.0000 PPM @ 15% O2
V	OR-0026	01/18/2002	UMATILLA GENERATING COMPANY, L.P. HERMISTON FACILITY	6.0000 PPM @ 15% O2
V	OH-0265	10/16/2001	Dresden Energy DRESDEN ENERGY LLC	6.0000 PPM @ 15% O2
~	CA-0950	01/11/2000	VALERO ENERGY CORPORATION VALERO REFINING COMPANY	6.0000 PPM @ 15% O2
~	IN-0085	06/07/2001	PSEG LAWRENCEBURG ENERGY FACILITY PSEG LAWRENCEBURG ENERGY FACILITY	6.0000 PPMDV @ 15% <u>O2</u>
~	<u>IN-0110</u>	10/05/2001	COGENTRIX LAWRENCE CO., LLC COGENTRIX LAWRENCE CO., LLC	6.0000 PPM @ 15% O2
~	CA-0949	05/22/2001	MOUNTAINVIEW POWER MOUNTAINVIEW POWER	6.0000 PPM @ 15% O2
V	<u>IN-0095</u>	12/07/2001	ALLEGHENY ENERGY SUPPLY CO. LLC (ACADIA BAY ENERGY ALLEGHENY ENERGY SUPPLY CO. LLC	6.0000 PPM @15% O2
~	AZ-0040	05/26/2000	Arizona Public Service APS WEST PHOENIX	6.0000 PPM @ 15% O2
V	AR-0041	08/08/2000	TPS - DELL, LLC. TPS - DELL, LLC	7.0000 PPM @ 15% <u>O2</u>
V	FL-0245	04/15/2003	FLORIDA POWER & LIGHT FPL MANATEE PLANT - UNIT 3	7.4000 PPM @ 15% <u>O2</u>
7	FL-0225	08/17/2001	EL PASO MERCHANT ENERGY COMPANY EL PASO BROWARD ENERGY CENTER	7.4000 PPM @ 15% O2

V	FL-0227	09/07/2001	EL PASO MERCHANT ENERGY CENTER EL PASO BELLE GLADE ENERGY CENTER	7.4000 PPM @ 15% <u>O2</u>
V	FL-0226	09/11/2001	EL PASO MERCHANT ENERGY CENTER EL PASO MANATEE ENERGY CENTER	7.4000 PPM @ 15% <u>O2</u>
~	FL-0263	02/08/2005	FLORIDA POWER AND LIGHT FPL TURKEY POINT POWER PLANT	7.6000 PPMVD @ 15 % O2
~	FL-0246	03/30/2001	TAMPA ELECTRIC COMPANY TECO BAYSIDE POWER STATION	7.8000 PPM @ 15% <u>O2</u>
V	OK-0050	01/21/2000	CALPINE CORP ONETA GENERATING STA	7.8000 PPM @ 15% <u>O2</u>
~	FL-0247	01/08/2002	TAMPA ELECTRIC COMPANY TECO BAYSIDE POWER STATION	7.8000 PPM @ 15% O2
V	FL-0240	08/07/2001	COMPETITIVE POWER VENTURES PIERCE, LTD. CPV PIERCE	8.0000 PPM @ 15% O2
V	MI-0363	01/07/2003	BLUEWATER ENERGY CENTER LLC BLUEWATER ENERGY CENTER LLC	8.0000 PPM @ 15% <u>O2</u>
~	VA-0260	11/21/2002	Cogentrix Energy Inc HENRY COUNTY POWER	8.0000 PPM @ 15% <u>O2</u>
V	VA-0260	11/21/2002	Cogentrix Energy Inc HENRY COUNTY POWER	8.0000 PPM @ 15% O2
~	FL-0241	01/17/2002	COMPETIVE POWER VENTURES CANA LTD. CPV CANA	8.0000 PPM @ 15% <u>O2</u>
V	WV-0014	12/18/2001	PANDA CULLODEN POWER, L.P. PANDA CULLODEN GENERATING STATION	8.2000 PPM @ 15% O2
V	OK-0070	06/13/2002	GENOVA OKLAHOMA LLC GENOVA OK I POWER PROJECT	8.2000 PPM @ 15% O2
V	AR-0070	08/23/2002	GENOVA ARKANSAS I, LLC GENOVA ARKANSAS I, LLC	8.2000 PPM @ 15% O2
~	NJ-0059	05/09/2001	LINDEN COGENERATION TECHNOLOGY COGEN TECHNOLOGIES LINDEN VENTURE, L.P	8.8000 LB/H
V	VA-0255	11/18/2002	Virginia Power VA POWER - POSSUM POINT	9.0000 PPM @ 15% <u>O2</u>
~	NC-0085	03/14/2001	CAROLINA POWER AND LIGHT CP&L ROWAN CO TURBINE FACILITY	9.0000 PPM @ 15% O2
V	FL-0219	05/03/2001	CPV ATLANTIC, LTD CPV ATLANTIC POWER GENERATING FACILITY	9.0000 PPM @ 15% O2
V	VA-0287	12/01/2003	JAMES CITY ENERGY PARK LLC	9.0000 PPM @ 15%

			JAMES CITY ENERGY PARK	<u>O2</u>
~	NC-0094	01/09/2002	GENPOWER EARLEYS, LLC GENPOWER EARLEYS, LLC	9.0000 PPM @ 15% <u>O2</u>
V	VA-0289	02/05/2004	DUKE ENERGY WYTHE, LLC DUKE ENERGY WYTHE, LLC	9.0000 PPM @ 15% <u>O2</u>
~	OH-0252	12/28/2004	DUKE ENERGY HANGING ROCK, LLC DUKE ENERGY HANGING ROCK ENERGY FACILITY	9.0000 PPM @ 15% O2
\checkmark	TX-0381	01/31/2003	ENNIS-TRACTEBEL II LP ENNIS TRACTEBEL POWER	9.0000 PPM @ 15% <u>O2</u>
~	GA-0094	12/27/2001	EFFINGHAM COUNTY POWER, LLC EFFINGHAM COUNTY POWER, LLC	9.0000 PPM @ 15% <u>O2</u>
V	<u>IN-0114</u>	07/24/2002	MIRANT SUGAR CREEK LLC MIRANT SUGAR CREEK LLC	9.0000 PPM @ 15% <u>O2</u>
~	OH-0257	12/27/2001	JACKSON COUNTY POWER, LLC JACKSON COUNTY POWER, LLC	9.0000 PPM @ 15% <u>O2</u>
~	CO-0052	08/11/2002	ROCKY MOUNTAIN ENERGY CENTER, LLC. ROCKY MOUNTAIN ENERGY CENTER, LLC.	9.0000 PPM @ 15% <u>O2</u>
V	IN-0086	05/09/2001	MIRANT SUGAR CREEK, LLC MIRANT SUGAR CREEK, LLC	9.0000 PPM @ 15% <u>O2</u>
~	IN-0087	06/06/2001	DUKE ENERGY, VIGO LLC DUKE ENERGY, VIGO LLC	9.0000 PPM @ 15% <u>O2</u>
~	<u>IN-0110</u>	10/05/2001	COGENTRIX LAWRENCE CO., LLC COGENTRIX LAWRENCE CO., LLC	9.0000 PPM @ 15% <u>O2</u>
~	NC-0082	12/21/2000	CAROLINA POWER AND LIGHT - RICHMOND CAROLINA POWER AND LIGHT - RICHMOND CO. FACILITY	9.0000 PPM @ 15% <u>O2</u>
>	SC-0066	04/03/2000	SANTEE COOPER RAINEY GENERATION STATION SANTEE COOPER RAINEY GENERATION STATION	9.0000 PPM @ 15% <u>O2</u>
V	TX-0262	01/03/2000	ARCHER POWER PARTNERS, L.P. ARCHER GENERATING STATION	9.0000 PPM @ 15% <u>O2</u>
~	TX-0262	01/03/2000	ARCHER POWER PARTNERS, L.P. ARCHER GENERATING STATION	9.0000 PPM @ 15% <u>O2</u>
~	NC-0086	01/10/2002	FAYETTEVILLE GENERATION, LLC FAYETTEVILLE GENERATION, LLC	9.0000 PPM @ 15% <u>O2</u>
~	TX-0296	07/14/2000	WISE COUNTY POWER COMPANY LLC WISE COUNTY POWER	9.0000 PPM @ 15% <u>O2</u>
Y	OH-0255	03/29/2001	PSEG WATERFORD ENERGY LLC PSEG WATERFORD ENERGY LLC	9.0000 PPM @ 15% <u>O2</u>

V	NM-0044	06/27/2002	DUKE ENERGY CURRY LLC CLOVIS ENERGY FACILITY	10.0000 PPM @ 15% <u>O2</u>
~	OH-0254	08/14/2003	DUKE ENERGY NORTH AMERICA DUKE ENERGY WASHINGTON COUNTY LLC	10.0000 PPM @ 15% <u>O2</u>
V	TX-0234	01/08/2002	EDINBURG ENERGY LIMITED PARTNERSHIP EDINBURG ENERGY LIMITED PARTNERSHIP	10.0000 PPM @15% <u>O2</u>
v	FL-0244	04/16/2003	FLORIDA POWER & LIGHT FPL MARTIN PLANT	10.0000 PPM @ 15% <u>O2</u>
>	OH-0248	09/24/2002	CALPINE CORPORATION LAWRENCE ENERGY	10.0000 PPM @ 15% <u>O2</u>
~	FL-0256	09/08/2003	PROGRESS ENERGY FLORIDA HINES ENERGY COMPLEX, POWER BLOCK 3	10.0000 PPMVD @15% O2
~	OK-0090	03/21/2003	DUKE ENERGY DUKE ENERGY STEPHENS, LLC STEPHENS ENERGY	10.0000 PPM @ 15% <u>O2</u>
V	AR-0052	02/15/2002	ARKANSAS ELECTRIC CO-OP THOMAS B. FITZHUGH GENERATING STATION	10.0000 PPM @ 15% <u>O2</u>
V	PA-0226	04/09/2002	LIMERICK PARTNERS, LLC LIMERICK POWER STATION	10.0000 PPM @ 15% O2
V	PA-0184	10/10/2000	CALPINE CONSTRUCTION FINANCE CO. CALPINE BERKS ONTELAUNEE POWER PLANT	10.0000 PPM @15% O2
V	PA-0179	08/07/2001	SWEC LLC SWEC LLC	10.0000 PPM@15% <u>O2</u>
~	MN-0053	07/15/2004	MN MUNICIPAL POWER AGENCY FAIRBAULT ENERGY PARK	10.0000 PPMVD @ 15% O2
V	NC-0095	05/28/2002	MIRANT GASTONIA LLC MIRANT GASTONIA POWER FACILITY	10.0000 PPM @ 15% <u>O2</u>
~	AZ-0034	02/15/2001	HARQUAHALA GENERATING CO. HARQUAHALA GENERATING PROJECT	10.0000 PPM @ 15% <u>O2</u>
>	PA-0160	10/10/2000	CALPINE CONSTRUCTION FINANCE CO., LP CALPINE CONSTRUCTION FINANCE CO., LP	10.0000 PPM @ 15% <u>O2</u>
~	<u>AR-0070</u>	08/23/2002	GENOVA ARKANSAS I, LLC GENOVA ARKANSAS I, LLC	10.2000 PPM @ 15% <u>O2</u>
>	OK-0070	06/13/2002	GENOVA OKLAHOMA LLC GENOVA OK I POWER PROJECT	10.2000 PPM @ 15% <u>O2</u>
V	VA-0262	12/06/2002	MIRANT DANVILLE, LLC MIRANT AIRSIDE INDUSTRIAL PARK	10.3000 PPM @ 15% <u>O2</u>
V	OH-0264	05/23/2002	NORTON ENERGY	11.0000 PPM @ 15%

			NORTON ENERGY STORAGE, LLC	O2
V	OK-0044	08/16/2001	SMITH COGENERATION OK INC SMITH POCOLA ENERGY PROJECT	11.5000 PPM @ 15% <u>O2</u>
V	NC-0101	09/29/2005	FORSYTH ENERGY PROJECTS, LLC FORSYTH ENERGY PLANT	11.6000 PPM @ 15% <u>O2</u>
V	MS-0064	08/16/2000	TPS MCADAMS. LLC TPS MCADAMS, LLC	11.8000 PPM @ 15% <u>O2</u>
~	SC-0062	09/22/2000	SC ELECTRIC AND GAS COMPANY - URQUHART STATION SC ELECTRIC AND GAS COMPANY - URQUHART STATION	12.0000 PPM @ 15% <u>O2</u>
~	MI-0362	04/21/2003	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP MIDLAND COGENERATION (MCV)	12.0000 PPM @ 15% O2
~	<u>GA-0101</u>	10/23/2002	DUKE ENERGY MURRAY LLC MURRAY ENERGY FACILITY	12.0000 PPM @ 15% <u>O2</u>
~	MI-0362	04/21/2003	MIDLAND COGENERATION VENTURE LIMITED PARTNERSHIP MIDLAND COGENERATION (MCV)	12.0000 PPM @ 15% <u>O2</u>
~	AR-0047	11/09/2001	HOT SPRINGS POWER PROJECT HOT SPRINGS POWER PROJECT	12.0000 PPM @ 15% <u>O2</u>
>	VA-0287	12/01/2003	JAMES CITY ENERGY PARK LLC JAMES CITY ENERGY PARK	12.0000 PPM @ 15% O2
>	NJ-0036	10/24/2001	AES RED OAK LLC AES RED OAK LLC	12.2000 PPM @ 15% <u>O2</u>
~	FL-0239	03/27/2002	JACKSONVILLE ELECTRIC AUTHORITY (JEA) JEA/BRANDY BRANCH	12.2100 PPM @ 15% <u>O2</u>
V	PA-0190	05/03/2000	LIBERTY ELECTRIC POWER, LLC LIBERTY ELECTRIC POWER , LLC	12.9000 PPM @ 15% <u>O2</u>
~	AR-0043	02/27/2001	PINE BLUFF ENERGY LLC PINE BLUFF ENERGY LLC	13.4000 PPM @ 15% <u>O2</u>
~	OH-0265	10/16/2001	Dresden Energy DRESDEN ENERGY LLC	13.5000 PPM @ 15% <u>O2</u>
~	TX-0383	03/06/2000	COBISA-FORNEY LIMITED PARTNERSHIP FORNEY PLANT	13.7000 PPM @ 15% <u>O2</u>
V	MS-0055	06/24/2002	EL PASO MERCHANT ENERGY CO. EL PASO MERCHANT ENERGY CO.	13.8000 PPM @ 15% <u>O2</u>
~	PA-0197	06/15/2001	RELIANT ENERGY HUNTERSTOWN, LLC RELIANT ENERGY HUNTERSTOWN, LLC	14.0000 PPM @ 15% <u>O2</u>
Y	OH-0254	08/14/2003	DUKE ENERGY NORTH AMERICA DUKE ENERGY WASHINGTON COUNTY LLC	14.0000 PPM @ 15% <u>O2</u>

	AZ-0036	12/02/2000	PINNACLE WEST ENERGY CORP.	14.0000 PPM @ 15%
~	NC-0094	01/09/2002	PINNACLE WEST ENERGY CORP./REDHAWK GEN. FACILITY GENPOWER EARLEYS, LLC	<u>O2</u> 14.0000 PPM @ 15%
V	IN-0114	07/24/2002	GENPOWER EARLEYS, LLC MIRANT SUGAR CREEK LLC	<u>O2</u> 14.0000 PPM @ 15%
~	PA-0187	03/21/2001	MIRANT SUGAR CREEK LLC GRAYS FERRY COGEN PARTNERSHIP	<u>O2</u> 14.0000 PPM @ 15%
~	VA-0289	02/05/2004	GRAYS FERRY COGEN PARTNERSHIP DUKE ENERGY WYTHE, LLC DUKE ENERGY WYTHE, LLC	O2 14.6000 PPM @ 15% O2
~	AL-0188	02/16/2001	TENASKA ALABAMA II PARTNERS TENASKA ALABAMA II GENERATING STATION	02 15.0000 PPM @ 15% O2
~	AL-0181	10/23/2001	DUKE ENERGY AUTAUGA, LLC DUKE ENERGY AUTAUGA, LLC	15.0000 PPM @ 15% O2
>	OK-0045	08/15/2001	REDBUD ENERGY LP REDBUD POWER PLT	15.0000 PPM @ 15% O2
V	TX-0437	07/05/2002	HARTBURG POWER, LP HARTBURG POWER, LP	15.0000 PPM @ 15% <u>O2</u>
~	MI-0303	07/26/2001	MIDLAND COGENERATION VENTURE MIDLAND COGENERATION	15.0000 PPM @15% <u>O2</u>
~	TX-0419	03/22/2000	CALPINE CONSTRUCTION FINANCE CO., LP CHANNEL ENERGY FACILITY	15.0000 PPM @ 15% <u>O2</u>
V	TX-0260	12/13/2000	LG & E POWER, INC. PALESTINE ENERGY FACILITY	15.0000 PPM @ 15% <u>O2</u>
V	OH-0255	03/29/2001	PSEG WATERFORD ENERGY LLC PSEG WATERFORD ENERGY LLC	15.0000 PPM @ 15% <u>O2</u>
~	AL-0180	12/11/2001	DUKE ENERGY DALE, LLC DUKE ENERGY DALE, LLC	15.0000 PPM @ 15% <u>O2</u>
V	OK-0046	05/17/2001	THUNDERBIRD GENERATION LLC THUNDERBIRD POWER PLT	15.4000 PPM @ 15% <u>O2</u>
V	FL-0216	06/04/2001	PROGRESS ENERGY FLORIDA HINES ENERGY COMPLEX, POWER BLOCK 2	16.0000 PPM @ 15% <u>O2</u>
~	TX-0294	03/20/2000	GATEWAY POWER PROJECT LP GATEWAY POWER PROJECT	16.3000 PPM @ 15% <u>O2</u>
~	IN-0092	07/20/2000	WHITING CLEAN ENERGY, INC. WHITING CLEAN ENERGY, INC.	16.4000 PPM @ 15% <u>O2</u>
V	TN-0156	04/09/2001	MEMPHIS GENERATION, LLC	16.6000 PPM @ 15 %

			MEMPHIS GENERATION, LLC	<u>O2</u>
~	FL-0233	09/21/2001	ORLANDO UTILITIES COMMISSION (OUC) OUC STANTON ENERGY CENTER	17.0000 PPM @ 15% <u>O2</u>
~	TX-0352	12/31/2002	BRAZOS VALLEY ENERGY LP BRAZOS VALLEY ELECTRIC GENERATING FACILITY	17.0000 PPM @ 15% <u>O2</u>
~	TX-0352	12/31/2002	BRAZOS VALLEY ENERGY LP BRAZOS VALLEY ELECTRIC GENERATING FACILITY	17.0000 PPM @ 15% <u>O2</u>
~	OH-0264	05/23/2002	NORTON ENERGY NORTON ENERGY STORAGE, LLC	17.0000 PPM @ 15% <u>O2</u>
~	OK-0096	06/03/2003	REDBUD ENERGY LP REDBUD POWER PLANT	17.2000 PPM @ 15% <u>O2</u>
~	MS-0044	03/27/2001	CALEDONIA POWER LLC CALEDONIA POWER LLC	17.4000 PPM @15% <u>O2</u>
~	SC-0071	04/09/2001	COLUMBIA ENERGY CENTER COLUMBIA ENERGY CENTER I-26 & US HWY 21 SOUTH	17.4000 PPM @ 15 % <u>O2</u>
~	SC-0061	04/09/2001	COLUMBIA ENERGY LLC COLUMBIA ENERGY LLC	17.4000 PPM @15% <u>O2</u>
y	TX-0388	02/12/2002	AUSTIN ELECTRIC UTILITY SAND HILL ENERGY CENTER	17.5000 PPM @ 15% <u>O2</u>
~	MS-0073	11/23/2004	RELIANT ENERGY CHOCTAW COUNTY, LLC	18.0000 PPM @ 15% 02
V	MN-0048	01/12/2001	NORTHERN STATES POWER COMPANY/XCEL ENERGY BLACK DOG GENERATING PLANT	18.0000 PPM @ 15% <u>O2</u>
~	MN-0043	11/17/2000	XCEL ENERGY, BLACK DOG ELECTRIC GENERATING STATION XCEL ENERGY, BLACK DOG ELECTRIC GENERATING STATION	18.0000 PPM @ 15% <u>O2</u>
V	MN-0060	08/12/2005	NORTH STAR POWER CO. DBA XCEL ENERGY HIGH BRIDGE GENERATING PLANT	18.0000 PPM @ 15% <u>O2</u>
~	MS-0073	11/23/2004	RELIANT ENERGY CHOCTAW COUNTY, LLC	18.3600 PPM @ 15% 02
V	MS-0073	11/23/2004	RELIANT ENERGY CHOCTAW COUNTY, LLC	18.3600 PPM @ 15% 02
V	PA-0186	05/04/2001	FLORIDA POWER & LIGHT FPL ENERGY MARCUS HOOK, L.P.	18.9000 PPM @ 15% <u>O2</u>
~	VA-0255	11/18/2002	Virginia Power VA POWER - POSSUM POINT	19.3000 PPM @ 15% O2
V	AR-0057	10/09/2001	TENASKA ARKANSAS PARTNERS, LP TENASKA ARKANSAS PARTNERS, LP	19.7000 PPM @ 15% O2

~	TX-0299	01/31/2000	DUKE ENERGY KAUFMAN LP KAUFMAN COGEN LP	20.0000 PPM @ 15% <u>O2</u>
~	TX-0330	03/14/2000	DUKE ENERGY JACK LP JACK COUNTY POWER PLANT	20.0000 PPM @ 15% O2
~	AL-0185	07/12/2002	BARTON SHOALS ENERGY, LLC BARTON SHOALS ENERGY	20.0000 PPM @ 15% O2
~	OK-0041	01/19/2000	NRG MCCLAIN LLC MCCLAIN ENERGY FACILITY	20.0000 PPM @ 15% <u>O2</u>
>	NC-0095	05/28/2002	MIRANT GASTONIA LLC MIRANT GASTONIA POWER FACILITY	20.0000 PPM @ 15% <u>O2</u>
~	FL-0186	02/24/2000	CITY OF GAINESVILLE CITY OF GAINESVILLE REGIONAL UTILITIES	20.0000 PPM @ 15% O2
~	TX-0350	01/31/2002	ENNIS-TRACTEBEL II LP ENNIS TRACTEBEL POWER	20.0000 PPM @ 15% <u>O2</u>
>	AZ-0035	12/14/2000	DUKE ENERGY ARLINGTON VALLEY DUKE ENERGY ARLINGTON VALLEY	20.0000 PPM @ 15% O2
~	TX-0261	06/26/2001	DUKE ENERGY BELL L.P. BELL ENERGY FACILITY	20.0000 PPM @ 15% O2
~	TX-0407	12/06/2002	STEAG POWER LLC STERNE ELECTRIC GENERATING FACILITY	20.2000 PPMVD @ 15% O2
~	NC-0095	05/28/2002	MIRANT GASTONIA LLC MIRANT GASTONIA POWER FACILITY	20.6000 PPM @ 15% O2
~	VA-0256	01/11/2002	TENASKA VIRGINIA PARTNERS, L. P. TENASKA FLUVANNA	21.0000 PPMVD @ 15% O2
~	TX-0405	12/15/2000	WESTVACO TEXAS LP WESTVACO TEXAS LP	22.0000 PPM @ 15% O2
~	TX-0405	12/15/2000	WESTVACO TEXAS LP WESTVACO TEXAS LP	22.0000 PPM @ 15% <u>O2</u>
~	MS-0058	12/13/2001	CHOCTAW GAS GENERATION, LLC CHOCTAW GAS GENERATION, LLC	22.3000 PPM @ 15% <u>O2</u>
~	AZ-0036	12/02/2000	PINNACLE WEST ENERGY CORP. PINNACLE WEST ENERGY CORP./REDHAWK GEN. FACILITY	23.0000 PPM @ 15% O2
~	TX-0233	10/29/2001	RELIANT ENERGY CHANNELVIEW LP RELIANT ENERGY- CHANNELVIEW COGENERATION FACILITY	23.0000 PPM @ 15% O2
~	AR-0051	04/01/2002	DUKE ENERGY DUKE ENERGY-JACKSON FACILITY	23.6000 PPM @ 15% O2
V	SC-0060	04/03/2000	SANTEE COOPER	23.7000 PPM @ 15%

			RAINEY GENERATING STATION	<u>O2</u>
>	TX-0402	10/17/2000	AVISTA-STEAG BRAZOA GENERATING FACILITY	24.0000 PMM @ 15% <u>O2</u>
>	TX-0374	03/24/2003	BP AMOCO CHEMICAL CO CHOCOLATE BAYOU PLANT	24.4000 PPM @ 15% O2S
V	LA-0120	02/26/2002	SHELL CHEMICAL LP GEISMAR PLANT	24.8000 PPM @ 15% O2
~	TX-0372	07/28/2000	WEST TEXAS ENERGY LIMITED PARTNERSHIP WEST TEXAS ENERGY FACILITY	25.0000 PPM @ 15% <u>O2</u>
~	IL-0074	02/25/2000	AMEREN CIPS - GRAND TOWER POWER STATION CIPS - GRAND TOWER POWER STATION	25.0000 PPM @ 15% <u>O2</u>
V	TX-0232	08/31/2000	CHAMBERS ENERGY, L.P. ELECTRIC GENERATING STATION	25.0000 PPM @ 15% <u>O2</u>
~	OH-0263	08/09/2001	CALPINE CORPORATION FREMONT ENERGY CENTER, LLC	25.0000 PPM @ 15% O2
Y	TX-0326	07/20/2000	THE AES AURORA AES WOLF HOLLOW LP	25.0000 PPM @ 15% <u>O2</u>
>	LA-0136	12/26/2001	VENTURES LEASE COMPANY, LLC PLAQUEMINE, IBERVILLE PARISH	25.0000 PPM @ 15% O2
V	TX-0351	03/11/2002	SEI TEXAS LLC WEATHERFORD ELECTRIC GENERATION FACILITY	25.0000 PPM @ 15% <u>O2</u>
V	LA-0153	05/16/2001	CARVILLE ENERGY LLC CARVILLE ENERGY CENTER	25.0000 PPM @ 15% <u>O2</u>
~	TX-0273	03/21/2000	COASTAL POWER COMPANY BASTROP CLEAN ENERGY CENTER	25.0000 PPM @ 15% <u>O2</u>
Y	LA-0146	05/10/2000	SHELL CHEMICAL COMPANY - GEISMAR PLANT SHELL CHEMICAL COMPANY - GEISMAR PLANT	25.0000 PPM @ 15% <u>O2</u>
V	TX-0411	03/26/2002	CALPINE CONSTRUCTION FINANCE COMPANY LP AMELIA ENERGY CENTER	25.0000 PPM @ 15% <u>O2</u>
V	TX-0391	12/20/2002	OXY VINYLS LP OXY COGENERATION FACILITY	25.0000 PPM @ 15% <u>O2</u>
V	TX-0391	12/20/2002	OXY VINYLS LP OXY COGENERATION FACILITY	25.0000 PPM @ 15% <u>O2</u>
~	KY-0081	06/07/2001	KENTUCKY PIONEER ENERGY, LLC KENTUCKY PIONEER ENERGY, LLC - TRAPP	25.0000 PPM @ 15% <u>O2</u>
>	TX-0337	12/21/2000	CEDAR POWER PARTNERS LP CEDAR BLUFF POWER PROJECT	25.0000 PPM @ 15% O2

V	OH-0268	03/26/2002	Global Energy, Inc. LIMA ENERGY COMPANY	25.0000 PPM @ 15% <u>O2</u>
~	CO-0049	01/17/2001	NORTH AMERICAN POWER GP -KIOWA CREEK NORTH AMERICAN POWER GP -KIOWA CREEK	25.0000 PPM @ 15% O2
V	LA-0127	08/25/2000	CLECO MIDSTREAM RESOURCES, LLC PERRYVILLE	25.0000 PPM @ 15% O2
V	TX-0297	03/14/2000	MOBIL OIL CORPORATION EXXON-MOBIL BEAUMONT REFINERY	25.0000 PPM @ 15% O2
~	CO-0042	11/13/2000	FRONT RANGE POWER COMPANY, LLC	25.0000 PPM @ 15% O2
V	IL-0074	02/25/2000	AMEREN CIPS - GRAND TOWER POWER STATION CIPS - GRAND TOWER POWER STATION	25.0000 PPM @ 15% O2
V	TX-0344	08/22/2001	DEER PARK ENERGY CENTER LP DEER PARK ENERGY CENTER	25.0000 PPM @ 15% O2
>	TX-0428	12/19/2002	OXY VINYLS LP HOUSTON OPERATIONS BATTLEGROUND SITE	25.0000 PPM @ 15% O2
V	TX-0343	06/27/2001	MC ENERGY PARTNERS LP MONTGOMERY COUNTY POWER PROJECT	25.0000 PPM @ 15% O2
~	LA-0164	01/31/2002	ACADIA POWER PARTNERS ACADIA POWER STATION, ACADIA POWER PARTNERS LLC	25.0000 PPM @ 15% O2
V	LA-0157	03/08/2002	PERRYVILLE ENERGY PARTNERS LLC PERRYVILLE POWER STATION	25.0000 PPM @ 15% O2
>	NC-0101	09/29/2005	FORSYTH ENERGY PROJECTS, LLC FORSYTH ENERGY PLANT	25.9000 PPM @ 15% O2
~	<u>IL-0091</u>	01/28/2000	LSP NELSON ENERGY, LLC LSP NELSON ENERGY, LLC	27.0000 PPM @ 15% <u>O2</u>
V	TN-0144	02/01/2002	CALPINE CONSTRUCTION FINANCE COMPANY, L. P. HAYWOOD ENERGY CENTER, LLC	28.3000 PPM @ 15% O2
~	TN-0144	02/01/2002	CALPINE CONSTRUCTION FINANCE COMPANY, L. P. HAYWOOD ENERGY CENTER, LLC	28.3000 PPM @ 15% <u>O2</u>
V	MS-0065	11/13/2001	LONE OAK ENERGY CENTER, LLC LONE OAK ENERGY CENTER, LLC	30.0000 PPM @ 15% <u>O2</u>
>	MS-0065	11/13/2001	LONE OAK ENERGY CENTER, LLC LONE OAK ENERGY CENTER, LLC	30.0000 PPM @ 15% <u>O2</u>
V	MS-0065	11/13/2001	LONE OAK ENERGY CENTER, LLC LONE OAK ENERGY CENTER, LLC	30.0000 PPM @ 15% <u>O2</u>
V	AR-0070	08/23/2002	GENOVA ARKANSAS I, LLC	30.0000 PPM @ 15%

			GENOVA ARKANSAS I, LLC		<u>O2</u>
¥	PA-0228	07/12/2001	ALLEGHENY ENERGY SUPPLY CO., L.L.C. SPRINGDALE TOWNSHIP STATION		36.0000 PPM @ 15% <u>O2</u>
V	MI-0268	06/26/2000	KM POWER COMPANY KM POWER COMPANY		37.0000 PPM @ 15% <u>O2</u>
~	WY-0061	04/04/2003	BLACK HILLS CORP. BLACK HILLS CORP./NEIL SIMPSON TWO		37.2000 PPM @ 15% <u>O2</u>
~	TX-0429	02/23/2000	VALERO REFINING CO TEXAS VALERO REFINING CO TEXAS CITY		38.0000 PPM @ 15% <u>O2</u>
~	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		40.0000 PPM @ 15% O2
V	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		40.0000 PPM @ 15% <u>O2</u>
V	OK-0056	02/12/2002	MUSTANG POWER LLC HORSESHOE ENERGY PROJECT		40.0000 PPM @ 15% O2
~	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		40.0000 PPM @ 15% O2
~	MS-0059	09/24/2002	LSP-PIKE ENERGY, LLC PIKE GENERATION FACILITY		40.0000 PPM @ 15% O2
V	OK-0055	02/12/2002	MUSTANG POWER LLC MUSTANG ENERGY PROJECT		40.0000 PPM @ 15% 02
~	MI-0268	06/26/2000	KM POWER COMPANY KM POWER COMPANY		60.0000 PPM @ 15% <u>O2</u>
~	IL-0091	01/28/2000	LSP NELSON ENERGY, LLC LSP NELSON ENERGY, LLC	*	64.0000 PPM @ 15% <u>O2</u>
V	AR-0024	02/28/2000	WRIGHTSVILLE POWER FACILITY WRIGHTSVILLE POWER FACILITY	ę	66.0000 PPM @ 15% O2
Che	eck Un-Ch	neck			

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Section II: Non-AQMD LAER/BACT Determinations

Application No.: ASPIDC

Equipment Category – Gas Turbine

1.	GENERAL INFORMATION		DATE: 5/16/200	03	
A.	MANUFACTURER: GE		1		
B.	TYPE: Combined Cycle	C. MODEL:	7FA		
D.	STYLE:	-			
E.	APPLICABLE AQMD REGULATION XI RULES:				
F.	COST: \$ (2000) SOURCE OF CO	OST DATA:			
G.	OPERATING SCHEDULE: 24 HRS/DAY	7 [AYS/WK	52 WKS/YR	
2.	EQUIPMENT INFORMATION		APP. NO.: ASPI	DC	
A.	FUNCTION: Power Generation (one of two identical gas turbine/HRSG units sharing common steam turbine). No duct burners. Capacity per gas turbine: 170 MW. Capacity of steam turbine: 185 MW.				
B.	max. (0 deg F), 3,760 MMBtu/hr avg. (50 deg F)	C. MAXIMU	M THROUGHPUT:		
D.	BURNER INFORMATION: NO.: TYPE: Dry low-NOx burners.				
E.	PRIMARY FUEL: Natural Gas	F. OTHER I	FUEL:		
G.	OPERATING CONDITIONS: Steady, at or near max. load.				
3.	COMPANY INFORMATION		APP. NO.: ASPI	DC	
Α.	NAME: IDC Bellingham, LLC		ASFI	B. SIC CODE:	
C.	ADDRESS: C/o FPL Energy LLC, 700 Universe Blvd., P.O. Box 14000 CITY: Juno Beach STATE: FL ZIP: 33408				
D.	CONTACT PERSON: David C. Shadle		E. PHONE NO.:		
4.	PERMIT INFORMATION		APP. NO.: ASPI	DC	
A.	AGENCY: Massachusetts Dept. of Environmental Protection	B. APPLICA	TION TYPE: new co	nstruction	
C.	AGENCY CONTACT PERSON: Gary Roscoe		D. PHONE NO.:	508-792-7650	
E.		NO.: ASPIDO		NCE DATE: 9/11/2000 NCE DATE:	
F.	START-UP DATE: Project Cancelled				

5 .	EMISSION INFORMATION	APP. NO.: ASPIDC			
Α.	PERMIT				
A1.	ppmvd@15%O2 (1-hr avg.): NOx 1.5 (can be up to 2.0 up for to 10% of operation, based on 12-mo. rolling avg.), CO 2.0, VOC, 1.0, NH3 2.0 (can be up to 5.0 for up to 10% of operation, based on 12-mo. rolling avg.); Lb/MMBtu: PM .008, SO2 .002.				
A2.	BACT/LAER DETERMINATION: The limits on NOx, CO, VOC and NH3 are as stringent or more stringent than prior existing SCAQMD BACT for this source category.				
A3.	BASIS OF THE BACT/LAER DETERMINATION: These limits were negotiated with the applicant and are presumably based on vendor guarantees.				
В.	CONTROL TECHNOLOGY	•			
B1.	MANUFACTURER/SUPPLIER:				
B2.	TYPE: SCR System plus Oxidation Catal	vst			
B3.	DESCRIPTION:	yse			
B4.		P/C NO.: ASPIDC ISSUANCE DATE: 9/11/2000 P/O NO.: ISSUANCE DATE:			
B5.	WASTE AIR FLOW TO CONTROL EQUIPMENT:	FLOW RATE:			
	ACTUAL CONTAMINANT LOADING:	BLOWER HP:			
B6.	WARRANTY:				
B7.	PRIMARY POLLUTANTS: NOx, CO, VOC, PM,	SOx			
B8.	SECONDARY POLLUTANTS: NH3				
B9.	SPACE REQUIREMENT:				
B10.	LIMITATIONS:	B11. UNUSED			
B12.	OPERATING HISTORY:				
B13.	UNUSED	B14. UNUSED			
C.	CONTROL EQUIPMENT COSTS				
C1.	CAPITAL COST: CHECK IF INSTALL	ATION COST IS INCLUDED IN EQUIPMENT COST			
	EQUIPMENT: \$ INSTALLATION: \$	(2000) SOURCE OF COST DATA:			
C2.	ANNUAL OPERATING COST: \$ (2000)	SOURCE OF COST DATA:			
D.	DEMONSTRATION OF COMPLIANCE				
D1.	STAFF PERMFORMING FIELD EVALUATION: ENGINEER'S NAME: INSPE	CTOR'S NAME: DATE:			
D2.	CEMS for NOx,	CO and NH3. Annual source test for NOx, CO,			
	VOC, PM and NH3.	, ,			
D3.	VARIANCE: NO. OF VARIANCES: CAUSES:	DATES:			
D4.	VIOLATION: NO. OF VIOLATIONS: CAUSES:	DATES:			
D5.	MAINTENANCE REQUIREMENTS: Periodic catalyst storage, handling, injection system mair	replacement/refurbishment. Ammonia ntenance.			

EMISSION INFORMATION

APP. NO.: **ASPIDC**

SOURCE TEST/PERFORMANCE DATA RESULTS AND ANALYSIS: D7.

DATE OF SOURCE TEST: Within 180 days after startup

OVERALL EFFICEINCY: CAPTURE EFFICIENCY:

SOURCE TEST/PERFORMANCE DATA:

OPERATING CONDITIONS:

TEST METHODS:

6. **COMMENTS**

APP. NO.: **ASPIDC**

The upper limit on NH3, that is allowed for up to 10% of operation, which is initially to be 5.0 ppm, may be reduced to as low as 2.0 ppm depending on the results of a 3-year ammonia emissions monitoring and study program to commence within 180 days following startup. It should be noted that the permit emission limits were never verified by performance data. AQMD learned in May 2003 that the project had been cancelled.

ATTACHMENT 8.1D-B

SCAQMD BACT Determination for the IDC Bellingham Project and Recent Article on the CPV-Warren Project

CPV-Warren ready to power up

by Roger Bianchini

The long-sought-after state air emissions permit that would allow Competitive Power Ventures to proceed with its plan to build a gas-fired electric generating facility in Warren County's 522 North Industrial Corridor may finally be imminent.

And while that has been a standing estimate made by CPV-Warren Project Director Tom E. Eiden since the March 10 end of the final public review process held by the Virginia Department of Environmental Quality (DEQ), it may be closer to realization now.

Eiden said he was very pleased with Tuesday's events in Richmond at a State Air Pollution Control Board meeting. The Board voted 4-1 to direct DEQ to make the final determination on the PSD (Prevention of Significant Deterioration) air permit, recommending one change that would add enforcement guarantees on NOx offsets to the permit.

Eiden and County Administrator Doug Stanley both pointed out that NOx offsets were included as part of the county's conditional use permit for the plant.

"Absolutely, I'm very pleased with what happened today," Eiden said following the meeting.

He explained that one "no" vote was actually made by a supporter of the air permit as written. "She had made it clear all day she supported us and actually was voting against the change to the permit. It is sort of precedent setting putting the enforcement responsibility on DEQ and we have deferred to them on that aspect of the permit," Eiden said.

Eiden estimated the permit would be issued by DEQ within 30 days.

Once the enabling air permit is issued, Eiden held to estimates of approximately nine months to put the financing package together before site work begins followed by 18 to 24 months of construction before the facility is completed.

The Air Control Board noted that Virginia put a regulating cap on NOx emissions from electrical generating units in May. That cap reduced such emission statewide by approximately 33,000 tons per control period (May 1 to Sept. 30) to a maximum level of 17,091 tons. Noxious Oxide emissions have been determined to adversely affect the earth's ozone layer.

"Assurances that CPV-WC will be required to participate in the [offset] program should also help address the concern for additional air quality deterioration resulting from [the plant] within the Shenandoah National Park," wrote the Air Control Board.

While most who spoke against approval of the plant during a February DEQ public hearing lauded the company for its efforts to make CPV-Warren one of the cleanest plants operationally in the country, its proximity to Shenandoah National Park, cited as one of the country's most polluted national parks already, was stated as too big an environmental risk.

Eiden said his one disappointment Tuesday was that representatives of environmental groups, including the Sierra Club and the Southern Environmental Law Council, failed to grasp his contention that the NOx offsets at CPV would actually lead to an improvement of the regional air quality. He said Tuesday that CPV-Warren is now the cleanest power plant proposal ever made in the U.S.

Warren County Board of Supervisors Chairman Tony Carter addressed the issues of CPV's proximity to the park and NOx offsets at Tuesday's meeting.

"Due to our proximity to the Shenandoah National Park and the importance of the park to our community, the potential impact of the facility was weighed carefully. The Board understands the impact on Shenandoah National Park and the residents of our community and has required 115% of NOx offsets that directly benefit our airshed to mitigate that impact.

"Despite concerns that have been raised about the ability of Warren County to implement this and other conditions, rest assured that it is our intent to enforce the conditions as approved with the conditional use permit for the proposed facility. We commend CPV for their proactive environmental approach to the project.

"As time has shown, the claims of a proliferation of power plants and their resulting emissions across the state as originally feared in 2001 has proved unfounded. The site in question is an appropriate one to serve the electric generation needs of Warren County, the Shenandoah Valley and the Commonwealth of Virginia."

County Administrator Doug Stanley told the Air Control Board that local land use decisions must be left in the hands of localities but added that the county had carefully scrutinized environmental issues as part of its approval process.

Stanley noted that the estimated \$1.9 million in annual tax revenue the plant would give the county was crucial to the community's economic future. He also noted that the proposed CPV location rested in the county's industrial corridor in a community with limited land-use choices.

"The difficulty for jurisdictions like ours, where over 15% of the land in the County is dedicated to Federal and State parks, and where you have significant floodplain, steep slopes and other environmental constraints is that there is little land left for commercial and industrial development that is needed to provide a balanced tax base. It is essential that localities be allowed to continue to control their destiny through local land use control and to be able to approve projects that meet applicable federal and state environmental laws.

"I believe it would be a unique situation if DEQ and the National Park Service were to begin dictating what land uses were appropriate or inappropriate for the localities which abut or impact the park.

"The Competitive Power Ventures project is important to Warren County because it will provide a local source of electric power generation and it will be a tremendous economic benefit to the County. But believe me, the leadership, both staff and elected officials, did not sacrifice the protection of the environment for tax dollars. The CPV application received unanimous approval from the County Planning Commission and Board of Supervisors only after an exhaustive review by staff and a third party consultant hired by the County.

"Final approval by the County is contingent on six pages of conditions approved by the Board and accepted by CPV."

Avtex News Flash! Page 1 of 3

The Warren Sentinel

Article date: June 23, 2005

EDA reviews ups and down of Royal Phoenix/Avtex

CPV remains optimistic, seeks contract extension

By: Roger Bianchini

The reclamation and transformation of the 467-acre Royal Phoenix\Avtex site was discussed at the most recent meeting of the Front Royal-Warren County Economic Development Authority.

EDA Executive Director Paul Carroll described what he called "positive movement" in site marketing and road plans, as well as in scheduled meetings with potential investors in the 160-acre park.

That park is currently envisioned to host a combination of service and tourism-related businesses, as well as a center for innovative business technologies.

Among potential uses being considered are a hotel./conference center, a Virginia Wine, Arts and Crafts Center, and a culinary institute. Carroll has described the park's other projected focus – innovative business technologies – as benefitting from the site's proximity to Dulles International Airport and from the increasing attention of international business on the Washington D.C. Metropolitan areas.

Carroll said discussions with Taiwanese economic development officials seeking a location for an east coast business incubator have been initiated. Those discussions, he said, will take on a more substantial tone once an investment developer becomes committed to the site.

The marketing plan for the site, being developed by the New York-based North American Realty Advisory Services, is moving about two months ahead of schedule, Carroll reported last month.

Carroll also acknowledged the cooperation of the federally mandated cleanup partner and lone surviving former site owner FMC Corporation in conducting site tours for potential business park clients.

FMC Site Manager John Torrence, in his monthly review of cleanup work at the site, said work included the processing of 3.41 inches of May rains through the site's wastewater treatment plant.

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Responding to a question from EDA board member Patty Wines, Torrence reported that all the trees planted in the southern most portion of the former basin area have died.

The trees, planted during a well publicized event that involved community school children, were part of the first step in reclaiming a portion of what will be a 240-acre Conservancy Park along the Shenandoah River.

Torrence theorized that the planting may have failed because it occurred prior to the end of a lengthy drought that affected the region several years ago.

Torrence said the lack of water combined with a beating sun on the clay-rich soil had effectively baked the young saplings. As a result, he said FMC is rethinking both the type of indigenous trees and spacing that will be used when the area is replanted.

Torrence also reported that both U.S. Army Corps of Engineers project manager Al Opstal and the Environmental Protection Agency's Bonnie Gross visited the site the previous week to view work on the final phase of decontamination of the massive power plant building.

Torrence said officials are determining whether additional personnel will be required to complete the work in time for the announced Sept. 19 implosion of the building – the last major structure standing on the site – by the Army Corps of Engineers.

"Time is not on our side," Torrence said. However, he added that FMC is proceeding optimistically to see that the building's four sections – the bag house, boiler house, powerhouse and compressor room – are clear of environmental contaminants prior to implosion day.

Earlier in Friday's meeting County Administrator Doug Stanley told the EDA the first four soccer fields of a planned seven-field complex on 33 acres at the site's southeast corner off Kerfoot Road at West Main Street, are scheduled to be ready for play next spring.

CPV optimistic

The board also heard that Competitive Power Ventures remains optimistic about the potential of obtaining contracts on power distribution and investors that will move the CPV-Warren gas-fired electrical generating facility project forward.

Local government is anticipating nearly \$2 million in projected annual commercial tax revenue from CPV.

CPV's current emissions permits with the state will expire on October 2007, and CPV has estimated an approximate 18 to 24 month construction window. If the plant is not under construction by October 2007, CPV will have to resubmit to the complex

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and lengthy state emissions permit approval process.

"We are fairly confident we'll be able to begin construction by then," Project Manager Peter Pawlowski told the board.

Pawlowski appeared to give the EDA an update and to seek an extension of CPV's option on the four acre parcel in the Kelly Industrial Park upon which the plant will be built.

Pawlowski told the board Dominion Power's move into the PJM (Pennsylvania-New Jersey- Maryland) regional marketing group was a key step in allowing CPV-Warren to move forward in acquiring a distribution contract.

Dominion is the largest supplier of power in Virginia.

Following a closed session, the board authorized the EDA staff to move on renegotiation of the CPV contract. CPV has received four extensions on its original contract, entered into with the EDA on Sept. 21, 2001. CPV paid a \$5,000 deposit upon signing the original \$125,000 contract.

The first nine-month extension, signed on Dec.31, 2002, included a renegotiated price of \$142,500, and the EDA received another \$5,000 deposit at that time.

The ensuing three extensions totaling 2-1/2 years included no further price increases or deposits. Average prices on industrial property in the U.S. 340/522 North Industrial corridor is now around \$60,000 an acre, staff members noted last week.

New Officers

Also last week the EDA Board elected officers for the coming year. Elected by 4-0 margins (with Rick Novak absent) were Chairman John LaBarca; Vice Chairman Mike South; Treasurer Billy Biggs; and Secretary Patty Wines.

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